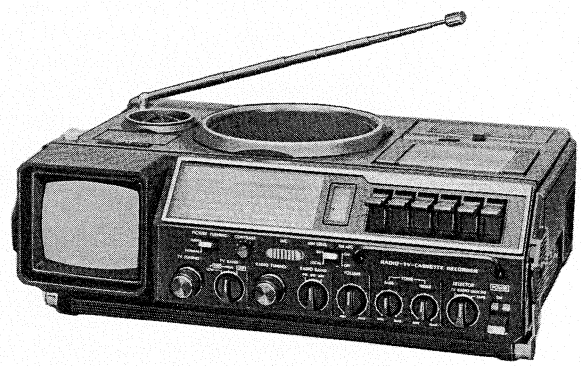
JVC

SERVICE MANUAL

MODEL
3080EUS

B/W PORTABLE
TELEVISION RECEIVER
WITH FM/SW/MW
RADIO & CASSETTER



No. 3297
November 1978

Index

	Page
Specifications	2
Servicing in the Field	3
How to Fit the Dial Cords	3
Disassembly Instruction	3
Alignment Instructions for TV	5
Parts Arrangement for Radio Alignment	8
Cassette Mechanism Adjustment	8
Heads Replacement & Adjustment	11
Recording Bias Adjustment	11
Servicing Guide	11
Mechanical Parts Diagram	13
Block Diagram	21
Electronic Parts List for TV	22
Electronic Parts List for Radio	23
UHF Tuner	24
Accessories	25
Packing	25

Specifications

TV standard:	Inter-carrier system CCIR TV standard (625 lines)
TV channels:	CCIR VHF channels 2-12 and UHF channels 21-69
Radio frequency ranges:	FM 88 – 108MHz SW 6 – 18MHz MW 510 – 1600kHz
Antennas:	Built-in antenna for TV & FM SW radio. Built-in ferrite core antenna for SW, MW radio.
TV tuner:	Contact-less electronic tuner
Picture tube:	4.5-inch, picture measured dia- gonally, 55 degree deflection.
Semi-conductors:	5 ICs, 48 Transistors, 51 diodes
Speaker:	16cm and 5cm round type, each 1 pc.
Tape:	Philips type cassette
Track system:	2-track monaural
Monitor system:	Variable sound monitor
Rewind time:	Within 100 sec. (with C-60 cassette)
Fast forward time:	Within 100 sec. (with C-60 cassette)
Wow & flutter:	Less than 0.3% (WRMS)
Recording system:	AC bias system
Erasing system:	AC erasing system
S/N ratio:	50dB
Frequency characteristics:	80 – 10,000Hz
Mike jack:	-60dBs (0.8mV, 8kΩ)
REC/PB jack:	DIN
input terminal	-60dBs (0.8mV), 9.2kΩ
output terminal	0dBs (0.8V RMS), 2.0kΩ
Built-in mike:	Condenser microphone
Audio output:	3.0W max. (2.0W at 10% distortion)
Power input:	AC 220V, 50Hz DC 9V (6D cells) or DC 12V car battery with car battery cord supplied (Model AP-23E), optional rechargeable battery pack (Model BP-001)
Power consumption:	14.5W on AC (Recording from TV with sound max.)
Dimensions:	13.3cm(H) x 44.4cm(W) x 27.2cm(D)
Weight:	5.5kg (without D cells)

Note: Design and specifications subject to change without notice.

Servicing in the Field

Cleaning the Cabinet

Clean the external appearance of Cabinet body when necessary, with a clean soft cloth with mild soap. Don't use any solution which contains benzine or petroleum.

Raster Centering

The centering device is 2 magnetic rings located on yoke rear cover. By alternately rotaing those 2 magnetic rings, the picture can be properly centered on the screen.

Deflection Yoke Adjustments

If the lines of the raster are not horizontal or corner shadows appear, loose the yoke clamp screw and rotate deflection yoke, push yoke snug up against bell of picture tube.

Vertical Height and Vertical Linearity Adjustments

When the upper or lower part of picture extends or shrinks, adjust the vertical height and vertical linearity controls alternately to fill the screen ¼ inch beyond the mask until the picture on test pattern is symmetrical from top to bottom. The height control extends (or shinks) mainly a lower part of raster, and the linearity control an upper part.

AGC Adjustment

Adjust the AGC control when picture is a very slight bend as it's top, or excessive snow.
AGC may be adjusted by tuning the control fully counter-clockwise when there is a very slight bend, and clockwise when snow.

How to Fit the Dial Cords

1. TV dial cord fitting

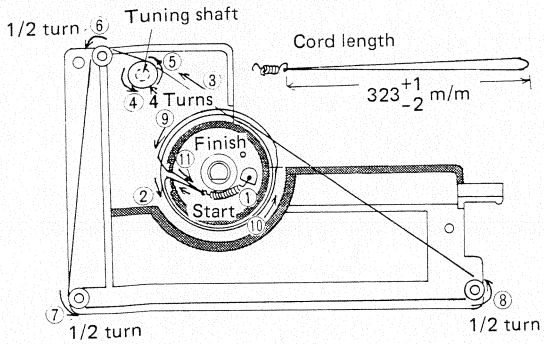


Fig. 1

1. Insert the drum in the shaft of variable resistor and turn it to left fully.
2. Fit the dial cord in order of above numbers.

2. Radio dial cord fitting

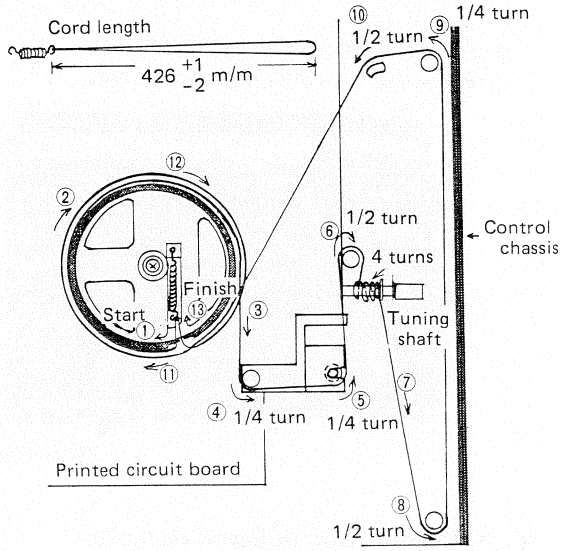


Fig. 2

1. Screw the drum to the shaft of variable capacitor and turn it to right fully. The state is above illustration.
2. Fit the dial cord in order of above numbers.

Disassembly Instructions

1. Rear Cover Removal

1. Unfasten 6 screws fastening the rear cover indicated in Fig. 3.
2. Remove the rear cover.

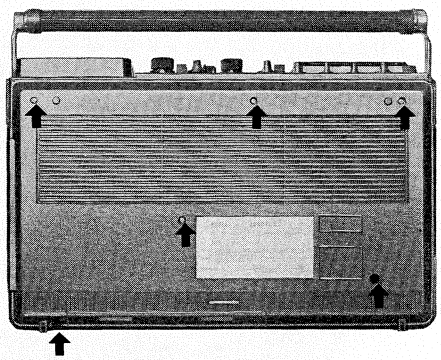


Fig. 3

2. Power Supply Block Removal

1. Remove the rear cover as refering to "Rear Cover Removal".
2. Unfasten a screw indicated in Fig. 4.
3. Pull the power supply block upwards.

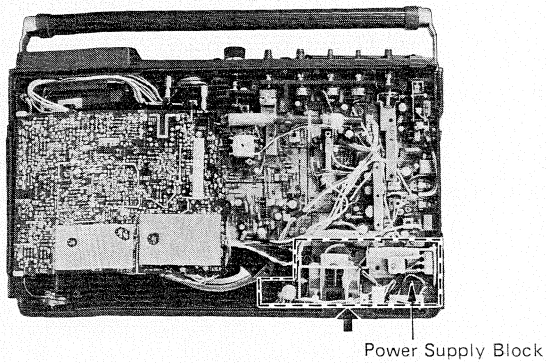


Fig. 4

3. TV Printed Circuit Board Removal

1. Remove the rear cover.
2. Pull out the TV band knob.
3. Pull the clipper fastening the TV printed circuit board to arrow direction indicated in Fig. 5.
4. Pull the TV printed circuit board upwards.

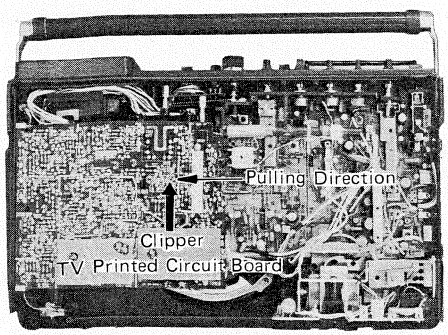


Fig. 5

After pulling out the TV band knob and unfastening the clipper from the board, the TV printed circuit board will be vertically placed as indicated in Fig. 6. It is convenience in the repairing because of intact wiring connections.

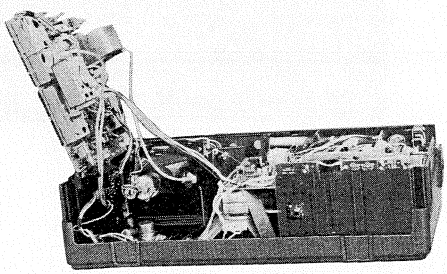


Fig. 6

4. Radio and Amplifier Printed Circuit Board in one Removal

1. Remove the power supply block and TV circuit board.
2. Pull out all knobs located on front except for the cassette knobs.
3. Unfasten 6 screw indicated in Fig. 7.
4. While lifting the board up, pull it backwards.

Note: *marked screw is located in the lower of 25 m/m from the printed circuit board.

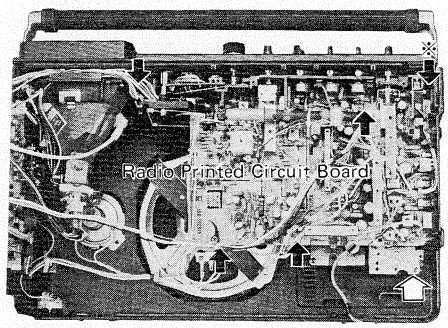


Fig. 7

5. TV Tuning Base Removal

After removing the radio and amplifier printed circuit board, unfastening 2 screws indicated in Fig. 8.

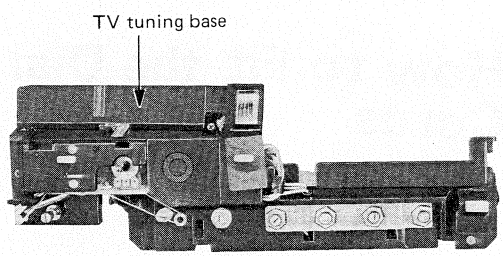


Fig. 8

6. Cassette Mechanism Ass'y Removal

In removing the cassette mecha. ass'y from the set, make to remove the cassette mechanism ass'y together the radio and amplifier printed circuit board in one.

1. After removing the power supply block and the TV printed circuit board, unfasten all knobs located on front except for cassette knobs.
2. Unfasten 6 screws indicated in Fig. 9.
3. While lifting the rear of the cassette mechanism ass'y up, pull it backwards.

Note: "*1" marked screw is located in interior of circle opening on the printed circuit board and "*2" marked screw in the lower of 25 m/m from the printed circuit board.

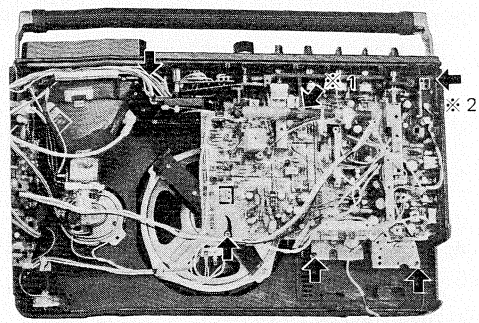


Fig. 9

7. Handle Ass'y Removal

Unfasten 2 bolts fastened both side of the handle with a hexagonal wrench for 4 m/m.

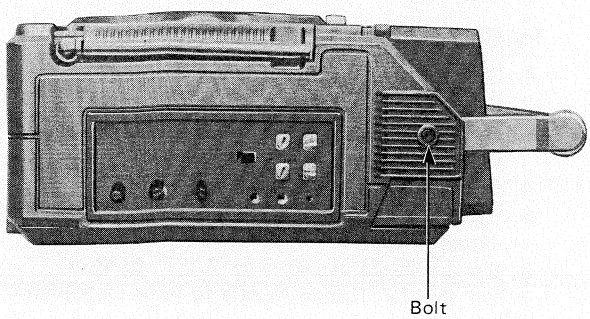


Fig. 10

Alignment Instructions For TV.

B. Voltage Adjustment

DC Voltmeter. . . . .Connect a DC voltmeter (15V range) between TP-91 and earth.
Adjust R518 until +5.9 Volts are obtained.

PIX IF Alignment

Test Equipments

Sweep generator with marker
Sweep frequency range 30~45MHz
Marker generator frequency 40.4, 38.9, 36.8, 34.7, 33.4MHz
Oscilloscope
Power source
DC 5.9V and 0.7V for AGC

Preparations before Alignment

1. Set "TV Band" switch to VHF Low position.
2. Connect the capacitor and resistor (1000pF & 560Ω) in series between TP-7 and output of the sweep generator.
3. Connect the resistor (10kΩ) between TP-12 and input of the oscilloscope.
4. Supply DC +0.7V for AGC voltage to TP-14 and DC +5.9V to TP-91.
5. Connect the base of X401 Transistor to earth to stop the working of the horizontal oscillator circuit.

Alignment procedures

1. Align the wave center to 36.8MHz and also for maximum gain with L102.
2. Align T102 and T103 to obtain equal height of 38.9MHz and 34.7MHz markers.

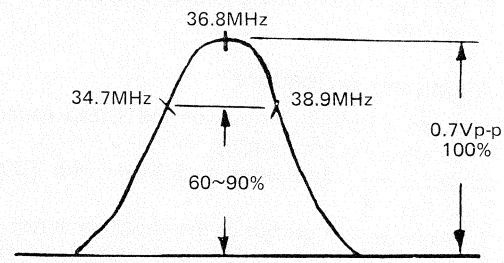


Fig. 11

Note: Keep the equal height of 38.9MHz and 34.7MHz markers even if there is slant on top of the response curve. (Fig. 12)

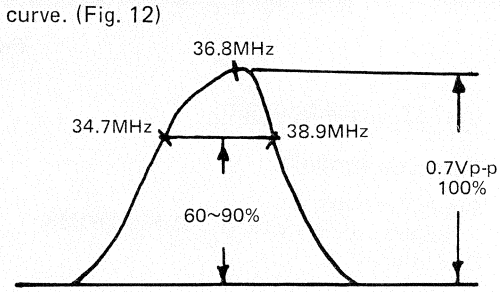


Fig. 12

Over-all Alignment

Preparation before Alignment

Change the connection of the sweep generator only from TP-7 to TP-3 on PIX IF Alignment abovementioned.

Alignment procedure

Align T3, T101 and L101 to obtain the response curve illustrated in Fig. 13.

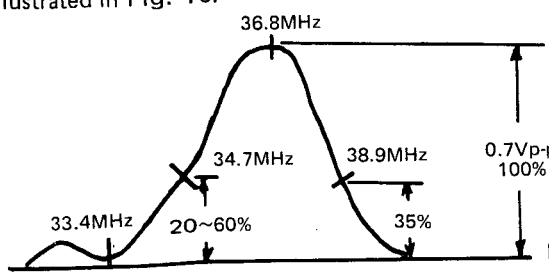


Fig. 13

Note: Align T102 if there is slant on top of the response curve.

Sound IF Alignment

Test Equipments

Sweep generator with marker
Sweep frequency range 5.5MHz±500kHz and marker generator frequency 5.5MHz
Oscilloscope

Preparations before Alignment

1. Connect the capacitor and resistor (10000pF & 1kΩ) in series between TP-12 and output of the sweep generator.
2. Connect input of the oscilloscope to TP-21.
3. Set the "TV Tuning" control (R37) to any non-signal position.

Alignment procedure

1. Make strongly output of the sweep generator within suppressing the limitter.
2. Align the wave center to 5.5MHz with T203 illustrated in Fig. 14.
3. Make weakly output of the sweep generator. (Fig. 14)
4. Align the wave center to 5.5MHz and also for maximum gain with T201, T202. (Fig. 14)

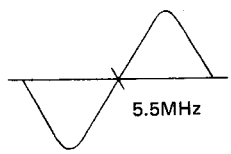


Fig. 14

VHF Tuner Alignment

Test Equipments

Sweep generator
Sweep frequency range 30MHz~250MHz
Oscilloscope
Power source
DC 5.9V and DC 0.7V for AGC
V.T.V.M.

Preparations before Alignment

1. Connect the vertical and Horizontal Terminals of oscilloscope to the corresponding of the sweep generator.
2. Align the vertical gain of oscilloscope to easy reading of 0.7Vp-p on the screen of oscilloscope.
3. Supply DC +0.7V of AGC voltage to TP-14 and DC +5.9V to TP-91.
4. Connect the V.T.V.M. to pin 2 of "TV Tuning" control (R37).
5. Set the antenna switch S2 to ROD position.
6. Turn the RF AGC control R152 to right fully.

Alignment procedures

1-1 IF Trap Alignment

1. Set "TV Band" switch to VHF Low position.
2. Connect IF signal (36.8MHz) of the sweep generator to TP-2.
3. Align L1 to obtain minimum gain for 36.8MHz.

1-2 Low Channel Alignment

1. Connect RF output of the sweep generator to TP-2.
2. Align the TV Tuning control R37 so that the V.T.V.M. may indicate DC 6.0V.
3. Set the sweep generator to 3CH.
4. Align the wave center to 55.25MHz with L11.
5. Align for maximum gain with L3 and L9.

1-3 High channel Alignment

1. Set "TV Band" switch to VHF High position.
2. Align the TV Tuning control (R37) so that the V.T.V.M. may indicate DC +7.7V.
3. Set the sweep generator to 9CH.
4. Align the wave center to 203.25MHz with L12.
5. Align for maximum gain with L5 and L8.

*repeat the steps abovementioned.

Start point Alignment for RF AGC

After Turning AGC control (R152) to left fully, turn slowly to right till disappearance of noises on screen of picture tube.

TV Channel Indicator Alignment

1. Set the TV Band switch to "High" position.
2. Set the TV Tuning Needle to "12" channel position.
3. Receive 12CH broadcasting program by adjusting volume (R32).
4. Set the TV Tuning Needle to "5" channel position.
5. Receive 5CH broadcasting program by adjusting volume (R29).
6. Set the TV Band switch to "UHF" position.
7. Set the TV Tuning Needle to your local high channel numeral.
8. Receive your local high channel by adjusting volume (R34).
9. Set the TV Tuning Needle to your local lower channel numerical.
10. Receive your local lower channel by adjusting volume (R31).

Alignment Instructions For Radio

MW IF Alignment

Test Equipments

Sweep generator with marker
Marker generator frequency 445, 455, 465kHz
Oscilloscope
Power supply DC 9V

Preparations before Alignment

1. Set "Selector" switch to Radio position, "Radio Band" switch to MW position and MW SENS/AFC switch to LOCAL/OFF position.
2. Set the variable capacitor to near the minimum capacity where no signal comes in.
3. Connect output of the sweep generator between TP-806 and earth of the variable capacitor.
4. Connect input of the oscilloscope to TP-804.
5. Supply DC +9V to J12.

IF Alignment

Align the wave center to 455kHz and for symmetrize "A" and "B" shown in below and also for maximum gain with CF-4.

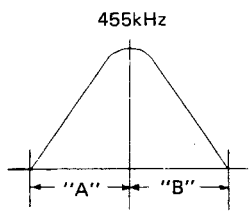


Fig. 15

IC Bias Alignment

Align IC Bias control (R838) to obtain maximum gain.

FM IF Alignment

Test Equipments

Sweep generator with marker
Marker generator frequency 10.55,10.625,10.7,10.775, 10.85MHz
Oscilloscope
Power supply DC 9V

Preparations before Alignment

1. Set "Selector" switch to Radio position, "Radio Band" switch to FM position and MW SENS/AFC switch to Local/OFF position.
2. Set the variable capacitor to near the minimum capacity where no signal comes in.
3. Connect the capacitor and resistor (33pF & 33kΩ) in series between TP-801 and RF output of sweep generator.
4. Connect (-) lead of a capacitor (3.3μF) to TP-805 and (+) lead of it to TP-802
5. Connect input of the oscilloscope to TP-803.
6. Supply DC +9V to J12.

Alignment procedures

1. Keep the output of sweep generator to 34dB (50μV)
2. Adjust the wave center to 10.7MHz with T801 (Fig. 16).
3. Change input of the oscilloscope from TP-803 to TP-804.
4. Adjust L804 to obtain maximum gain and also for symmetrize to left and right on S curve characteristics. (Fig. 17)

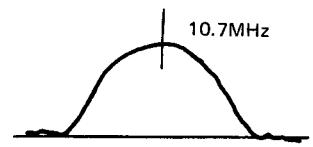


Fig. 16

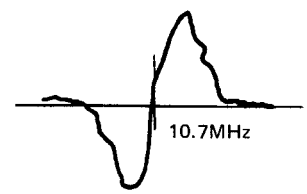


Fig. 17

MW, SW RF Alignment

Preparations before Alignment

1. Set "Selector" switch to radio position and "Radio Band" switch to MW or SW position according with chart below.
2. Set MW SENS/AFC switch to DX/ON position.
3. Connect output of the standard signal generator (AM modulation 400Hz, 30%) to test loop antenna.
   Keep the distance between the test loop antenna and built-in ferrite bar antenna to 60cm.
4. Connect V.T.V.M. to speaker terminals.

Alignment Procedure

Align according to the chart below.

Step	Band	Frequency of marker	Variable capacitor Setting	Adjust	V.T.V.M. Reading
1	MW	500kHz	Maximum	T803	Maximum
2		1650kHz	Minimum	C862	
3		Repeat the steps 1~2.			
4		620kHz	tune 620kHz	T805 (MW)	Maximum
5		1400kHz	tune to 1400kHz	C853	
6		Repeat the steps 4~5.			
7	SW	5.8MHz	Maximum	T802	Maximum
8		18.6MHz	Minimum	C861	
9		Repeat the steps 7~8.			
10		6MHz	tune to 6MHz	T805 (SW)	Maximum
11		18MHz	tune to 18MHz	C852	
12		Repeat the steps 10~11.			

Chart 1

FM RF Alignment

Preparations before Alignment

1. Set "Band Selector" switch to radio position, "Radio Band" switch to FM position and MW SENS/AFC switch to "LOCAL/OFF" position.
2. Connect a capacitor (1000pF) between output of the standard signal generator (FM modulation 400Hz, 30%) and J7.
3. Connect V.T.V.M. to speaker terminals.

Alignment Procedures

Adjust according to the chart below.

Step	Frequency of marker	Variable capacitor Setting	Adjust	V.T.V.M. Reading
1	87.5MHz	Maximum	L803	Maximum
2	109MHz	Minimum	C823	Maximum
3	Repeat the steps 1. 2			
4	90MHz	tune to 90MHz	L801	Maximum
5	106MHz	tune to 106MHz	C805	Maximum
6	Repeat the steps 4. 5			

Chart 2

Parts Arrangement For Radio Alignment

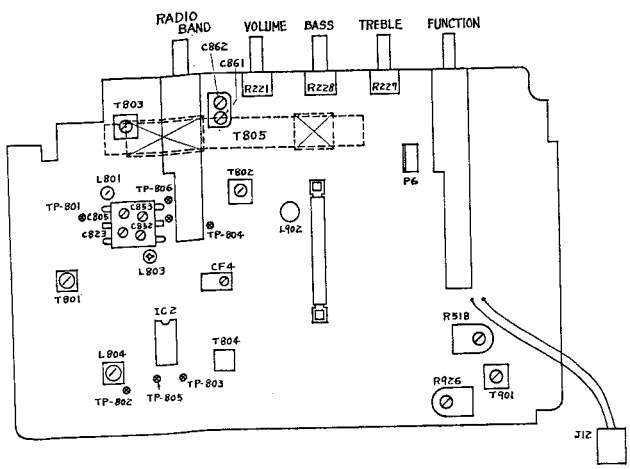


Fig. 18

Cassette Mechanism Adjustment

1. Auto stop moving range adjustment

When moving the point of the detector cap within 0.5~1.8mm in the playback mode, the auto-stop mechanism should be operated.
If no operating, bend the portion Ⓐ of the detector plate to the direction shown by the arrow with a plier. (Fig.19, 20)

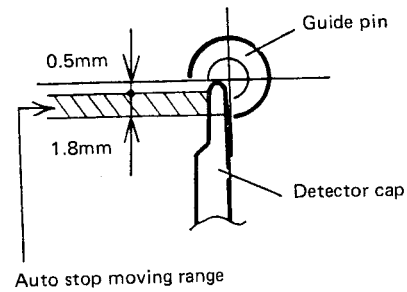


Fig. 19

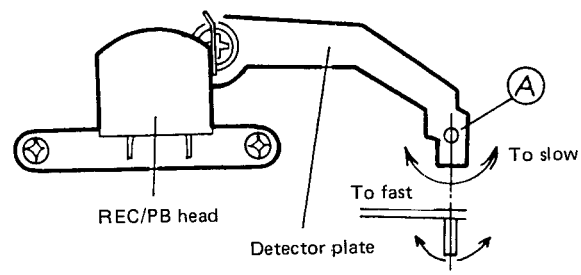


Fig. 20

2. Auto Stop Detection pressure Adjustment

Place the cassette mechanism Ass'y vertically and suspend the tension gauge on the point of the detector cap.
When pulling the tension gauge within 45~65g the auto-stop mechanism should be operated in the playback mode.
If no operating, bend the portion Ⓐ of the adjusting arm to the direction shown by the arrow with a pliar (Fig. 21, 22)

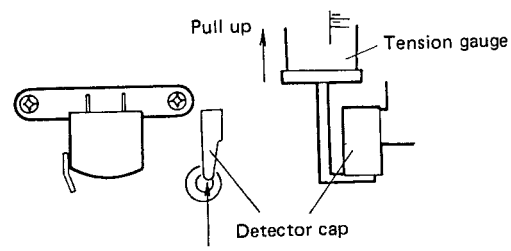


Fig. 21

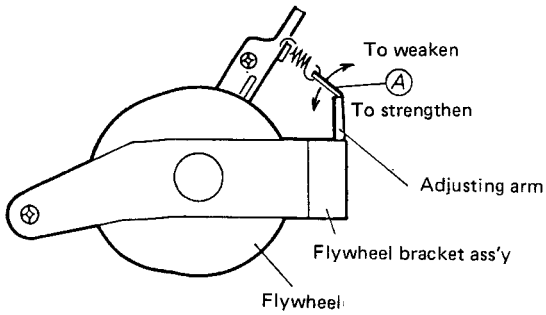


Fig. 22

3. Flywheel Thrust Adjustment

Loosen and adjust the adjusting screw to keep the clearance between the flywheel and the flywheel bracket within 0.2~0.4mm.
After the adjustment, apply lock paint to the adjusting screw. (Fig. 23)

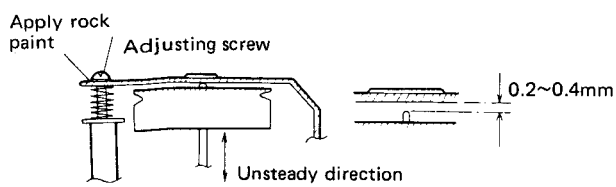


Fig. 23

4. Pause Operation & The Timing Check

1) Pause Operation & the Timing Check

In the playback mode, check that the running of the cassette tape is temporarily stopped when depressing the PAUSE button and then when pressing the PAUSE button again the button is unlocked, the playback mode is restored and the running of the cassette tape is restarted.

Note: Be sure to use a C-30 type cassette tape in this checking.

2) Pause Operation & the Timing Adjustment

a. Adjust the pinch arm lever to keep the clearance between the pinch roller and the capstan more than 0.5mm while depressing the PAUSE button.
Bend the portion Ⓒ of the pinch arm lever to the direction A in shorter clearance and the direction B in longer (Fig. 24).

b. Adjust the pinch arm lever by bending the portion Ⓒ to the direction A, if the rotation of reel disc is stopped or the cassette tape is pulled out from the cassetter by the pinch roller rotation while depressing the PAUSE button in the playing mode (Fig. 24).

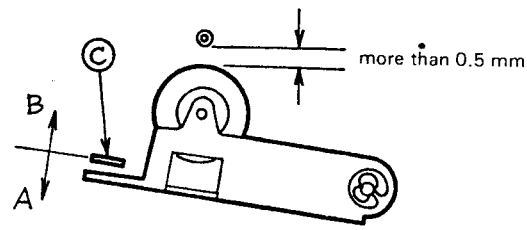


Fig. 24

5. Cue, Review Operations Check & Adjustment

1) Cue, review operation check

a. Check that the rotation of the pinch roller is stopped and then the rotation of rewind reel base is stopped, when depressing slowly the CUE button in the play mode.
Nextly check that the rotation of the rewind reel base is started and then the pinch roller is rotated, when unlocking the depressing of the cue button.

b. Check that the rotation of the pinch roller is stopped and then the rotation of the rewind reel base is stopped, when depressing slowly the Rewind button in the playback mode.
Nextly check that the rotation of the rewind reel base is started and then the pinch roller is rotated, when unlocking the depressing of the REVIEW button.

Note: If these operations are made in the contrary order, the cassette tape will be drawn out from cassetter and tangled to the pinch roller.

2) Review timing Adjustment

a. Bend the portion Ⓒ of the pinch arm lever to direction A if cassette tape is drawn out from the cassetter on starting of the review operation. (Fig. 25)

b. Bend the portion Ⓒ of the pinch arm lever to the direction B, if the mechanism is made in fast forward mode on starting of the review operation. (Fig. 24)

3) Cue timing Adjustment

a. Bend the portion Ⓒ of the pinch arm lever to the direction A, if the cassette tape is drawn out from the cassette on starting of the review operation.

b. Bend the portion Ⓒ of the pinch arm lever to the direction B, if the mechanism is made in fast forward mode on starting of the cue operation.

* After making the Review and Cue timing adjustments, be sure to make "pause operation & the timing check" of the section 4.

* Check that the clearance between the pinch roller arm and the pinch arm lever is more than 0.2mm, when depressing the REVIEW button in the recording mode (Fig. 25).

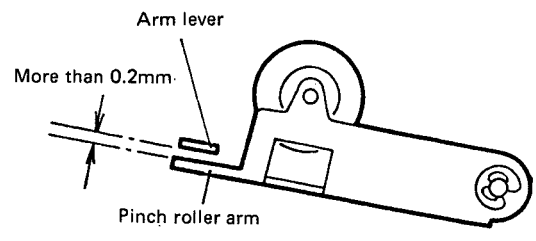


Fig. 25

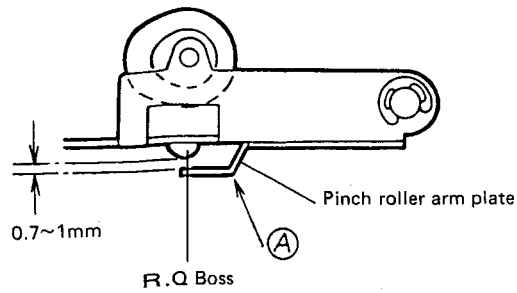


Fig. 26

* Bend the portion Ⓐ of the pinch roller arm to keep the clearance between the RQ boss and the pinch roller arm plate within 0.7~1mm. (Fig. 26)

6. Head Position Adjustment

Loosen 4 adjusting screws and then adjust the position of the REC/PB and erasing heads as shown in Fig. 27.

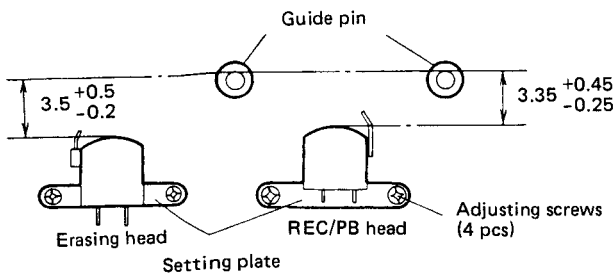


Fig. 27

7. Clearance adjustment between Recording slide lever and Recording safety lever

Bend the portion Ⓐ of the recording slide lever to keep the clearance between the recording slide lever and the recording safety lever within 0.5~0.8mm. (Fig. 28)
If the clearance is more than 0.8mm, the recorded cassette tape may be erased by operating of recording slide switch, when depressing the record button in the playback mode.

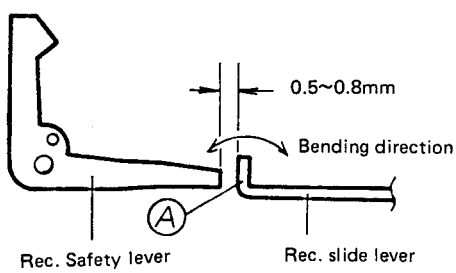


Fig. 28

8. Recording torque Adjustment

Adjust the playing torque within 40~70g-cm with the crutch plate. After cleaning the dirt on the rubber parts and the rotating portions, change the crutch spring plate to "3" position of the crutch pully in lighter torque, and to "1" position in heavier. (Fig. 29)

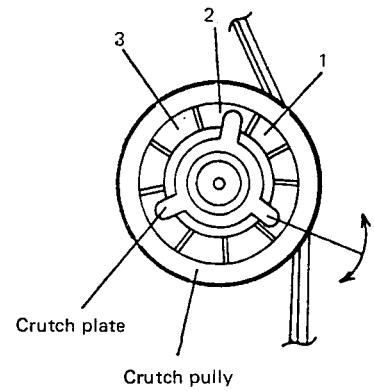


Fig. 29

9. FF & REWIND Torque Adjustment

1) FF Torque Adjustment

Depress the Cue button and then suspend the torque gauge on reel disc from "take up" side.
Check that the reading is more than 60g-cm, when pulling out the gauge. If lighter, bend the portion Ⓒ of the FF button lever located on reverse side of the chassis base to the direction A shown in Fig.29.

2) REW Torque Adjustment

Depress the Review button and then suspend the torque gauge on reel disc from "supply" side.
Check that the reading is more than 60g-cm, when pulling out the gauge. If lighter, bend the portion Ⓓ of the REW button lever located on reverse side of the chassis base to the direction Ⓑ shown in Fig. 30.

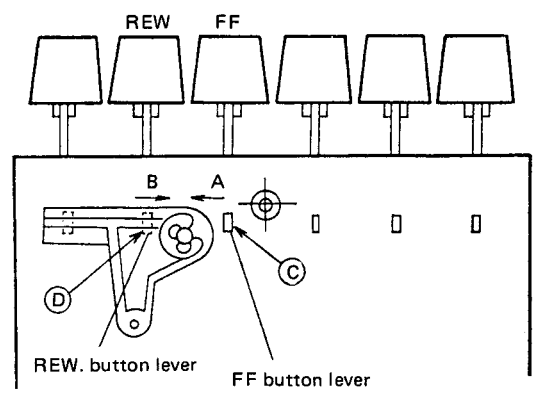


Fig. 30

Note: The Cue & Review mechanisms may be made inferior, if the levers are excessively bent in the adjustments above.

Heads Replacement & Adjustment

A. Heads Replacement

Replace the REC/PB and erasing heads if they are in wearing off, broken wires or too magnetized.
Unfasten 2 screws Ⓐ Ⓑ to replace the REC/PB head and 2 screws Ⓒ Ⓓ to replace the erasing head shown in Fig. 31. After replacing the heads, adjust the head position by refering to "head position adjustment" of the section 6.

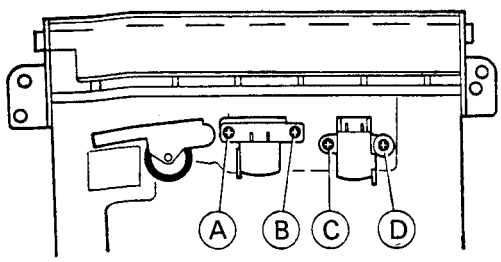


Fig. 31

B. Heads Angle Adjustment

After replacing the heads, be sure to make the head angle adjustment.
1. Connect a V.T.V.M. to the speaker terminals.
2. Make playing with the cassette tape for the head angle adjustment (Model VTT657) or the equality good.
3. Set the Treble (R227), Bass (R228) and Volume (R221 controls to their center position.
4. Loosen the screw Ⓑ shown in Fig. 31 and adjust the screw so that the reading of V.T.V.M. is max.
5. After the adjusting apply lock paint to the screw Ⓑ.

Recording Bias Adjustment

1. Connect the mili-volt meter and the frequency counter between TP-901 (REC/PB head) and earth in the recording mode.
2. Set the Beat Cut switch to "1" marked position.
3. Turn the oscillator transformer (T901) to tune to 48kHz.
4. Adjust the Bias control (R926) to obtain 7mV.
5. Repeat the step 3, 4.
6. Confirm that the oscillator frequency is less than 47kHz when the beat cut switch was reset to "2" marked position.

Hum Level Adjustment

1. Connect V.T.V.M. to speaker terminals.
2. Set the Treble (R227), Bass (R228) and Volume (R221) controls to right fully.
3. Align L902 so that V.T.V.M. reading is minimum in pause mode and play mode.

Servicing Guide

A. Deteriorating sound in playing

1. Check the REC/PB head if it is attached to dirt or dust.
2. Check the REC/PB head if it is weared off.
   If so, the response will be bad in high frequency range.
3. Check that the wirings are cut or all transistors are correctly operating.

B. Crash Sound in Recording

When you make playing the recorded Demo cassette tape, the tone quality is clear.
But when you make playing the cassette tape which recorded with normal blank tape, the tone quality is bad.
In this case check as following.
1. Make monitoring the recording sound with an earphone.
2. If bad on step 1, make the checking of the broken wirings and all the transistors.
3. If OK on step 2, make the checking of the recording bias oscillator circuit.

C. WOW-FLATTER

Check as following in increased wow and flatter.

Causes	Symptoms	Servicing
Capstan or Flywheel	• The capstan shaft deflection • Heavy rotation of the flywheel	• Replace the flywheel • Adjust the flywheel thrust • Oiling to or cleaning the flywheel
Pinch-roller	• Rough rotation • Inaccuracy angle for the capstan • Non-sticking pressure to the tape	• Replace the pinch-roller • Clean the pinch-roller • Make the pinch roller in parallel with the capstan • Replace or adjust the spring
Belt	• Dirty belt • Slipping belt	• Replace or clean the belt
Back-Tension	• Rough back-tension	• Replace or oil to the back-tension spring.
Motor	• The motor shaft deflection • The motor pully dirt • The pully swing	• Replace or clean the motor shaft • Replace the take-up idler ass'y

Chart 3

D. Rewinding Faults

Causes	Symptoms	Servicing
In the playback Mode	• Slipping between the take-up idler and the reel base • The take-up idler • Slipping between the take-up idler and the capstan belt	• Replace or adjust the take-up idler spring • Clean rubber portion of the reel base • Replace or clean the capstan belt
In the Cue Mode	• The FF idler slipping • The FF idler • The capstan belt slipping	• Clean rubber portion of the idler • Replace or adjust the spring • Replace the idler • Replace or clean the capstan belt
In the review Mode	• The REW idler or the FF idler slipping • The FF idler • Capstan belt slipping	• Clean rubber portion of the idler • Replace or adjust the spring • Replace the idler • Replace or clean the capstan belt

Chart 4

E. Noises

Causes	Symptoms	Servicing
Noises in the playback Mode	• Noises from the take-up idler • Noises from the rotating portions	• Replace the take-up idler • Lubricate to the rotating parts
Noises in the Cue or REW Mode	• Noises from the FF idler • Noise from the REW idler	• Lubricate or replace the idler
Motor Noises	• Noises from the motor	• Replace the motor

Chart 5

F. Cleaning

Be sure to clean the heads, capstan, pinch roller and other parts which come into contact with the tape with cotton stick in a little alcohol.
The dirty heads will deteriolate the sound quality and cannot erase.

G. Oiling

Make oiling 1~2 drops to the reel disc, pinch roller and rewind idler bealings 1~3 times in a year.
If oiling to too much, it will scatter the oil to the parts near and cause the rough rotating.

Mechanical Parts Diagram

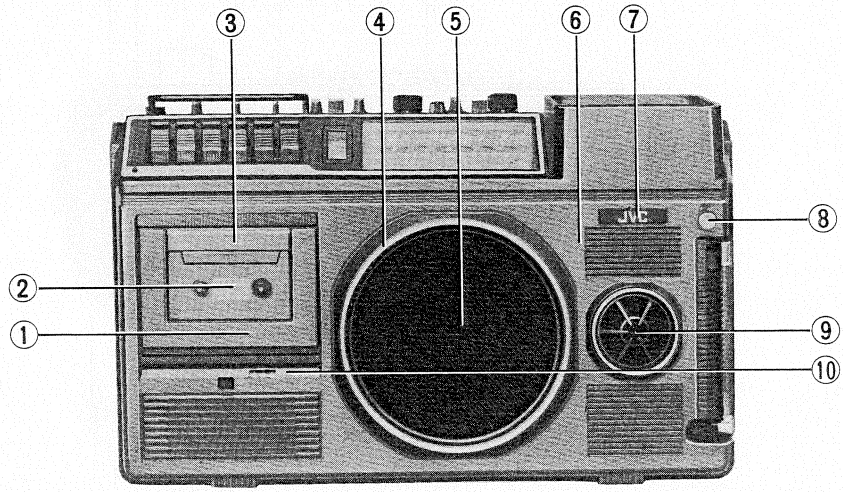


Fig. 32

No.	Parts Name	Parts No.	Q'ty
1	Cassette Door	A20908-00B	1
2	Reflection Label	A45551-002	1
3	Cassette Cap	A32070-002	1
4	Speaker Ring	A32073-001	1
5	Speaker Net	A32072-001	1
6	Front Panel	A10373-002	1
7	Mark	QXM2242-001	1
8	Lamp Knob	A45564-001	1
9-1	Tweeter Plate	A45927-001	1
-2	Tweeter Net	A45926-001	1
10	Counter Lens	A45919-001	1

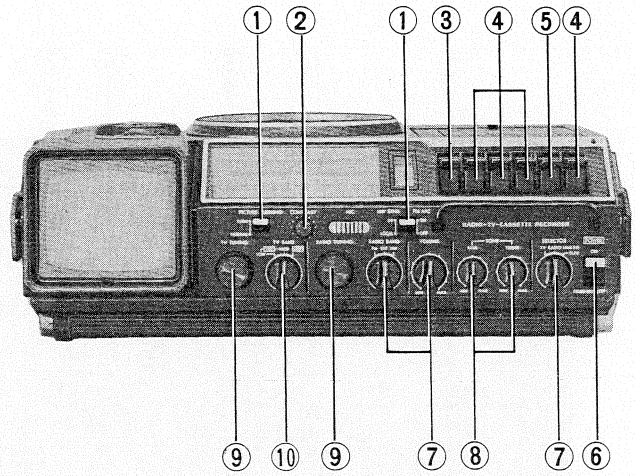


Fig. 33

No.	Parts Name	Parts No.	Q'ty
1-1	Switch Knob	A31926-00A	2
-2	Top Washer	A45584-001	2
2	Knob	AXKM712-2014	2
3	Cassette Knob	A32082-002	1
4	Cassette Knob	A32082-001	4
5	Cassette Knob	A32082-003	1
6-1	Power Knob	A45994-00A	1
-2	Power Washer	A60068-001	1
7	Select Knob	AXKM220-3007	3
8	Knob	AXKM216-3009	2
9	Tuning Knob	AXKM525-3006B	2
10	Knob	AXKMA20-3010	1

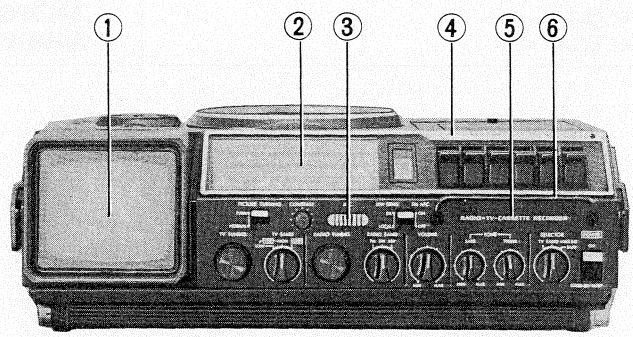


Fig. 34

No.	Parts Name	Parts No.	Q'ty
1	Protector Glass	A20904-001	1
2-1	Indicator Ass'y	A32125-00B	1
-2	Indicator Mask	A32071-001	1
3	MIC Plate	A45928-001	1
4	Ornament Plate	A20912-002	1
5	Top Panel	A10374-002	1
6	Guard Bar	A45931-001	1

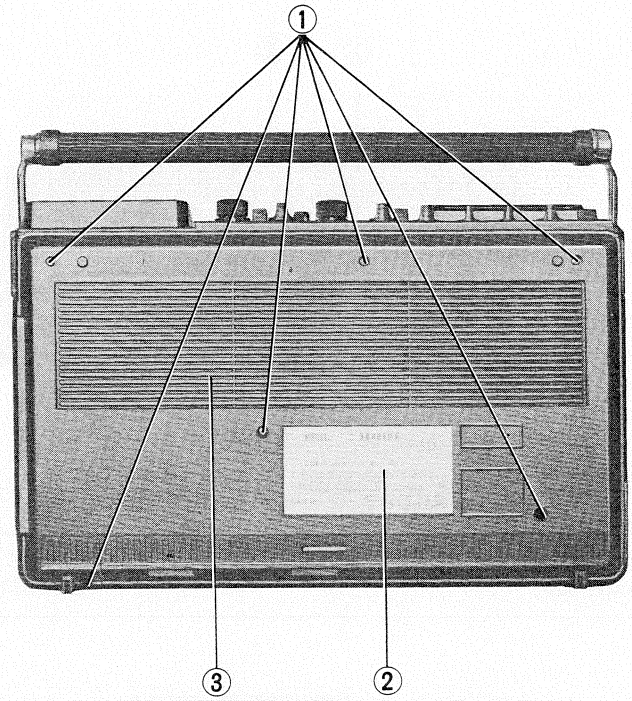


Fig. 35

No.	Parts Name	Parts No.	Q'ty
1	Tap. Screw	A45433-002	6
2	Rating Label	A31689-125	1
3	Rear Cover	A10375-002	1

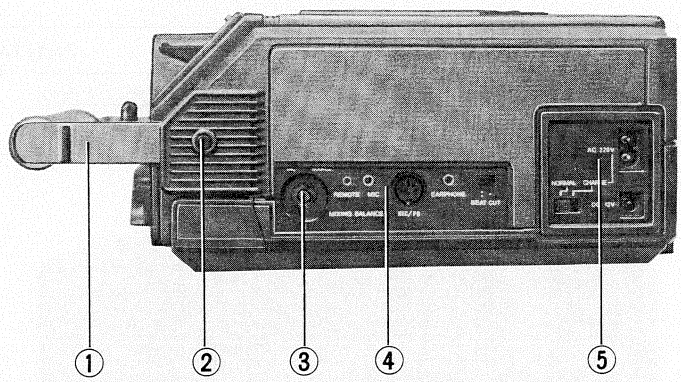


Fig. 36

No.	Parts Name	Parts No.	Q'ty
1	Handle Ass'y	A32077-00A	1
2-1	S. Bolt	BYS4012JS	2
-2	Handle Bushing	A45921-001	2
-3	Tapping Plate	A45939-001	2
3	Knob	AXKM712-2014	1
4	Jack Board Ass'y (S14,15,J14,15,16,17)	A32075-00B	1
5	Switch Plate	A32078-003	1

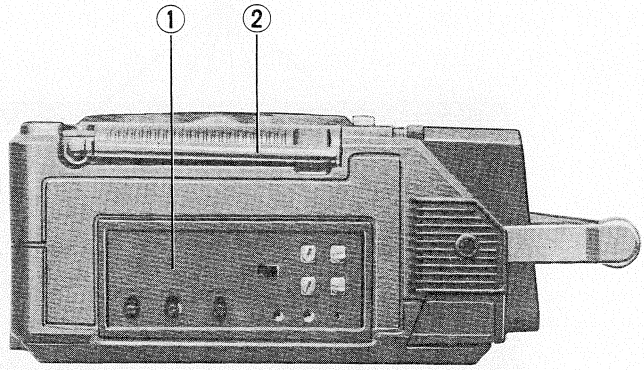


Fig. 37

No.	Parts Name	Parts No.	Q'ty
1	Ant. Ter. Ass'y	A20911-00A	1
2	Rod Antenna	QZR2110-001	1

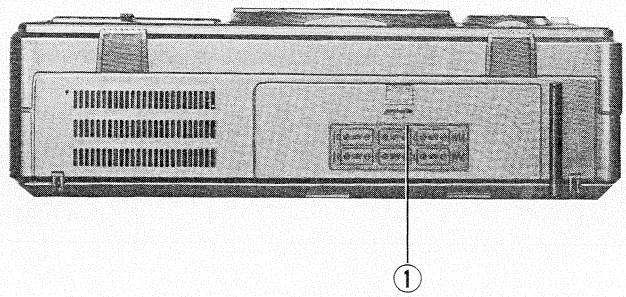


Fig. 38

No.	Parts Name	Parts No.	Q'ty
1-1	Battery Cover	A20903-002	1
-2	Cushion (attached to reverse side)	A41455-042	1

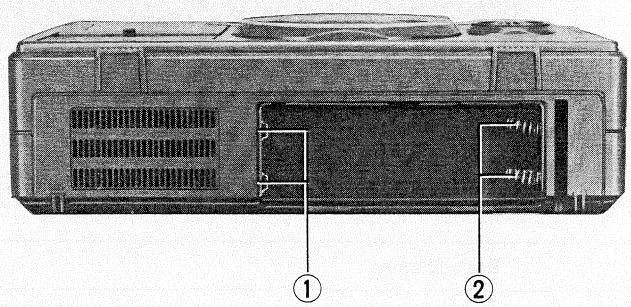


Fig. 39

No.	Parts Name	Parts No.	Q'ty
1	Battery Plate	A45375-001	2
2	Contact Spring	A45377-001	2

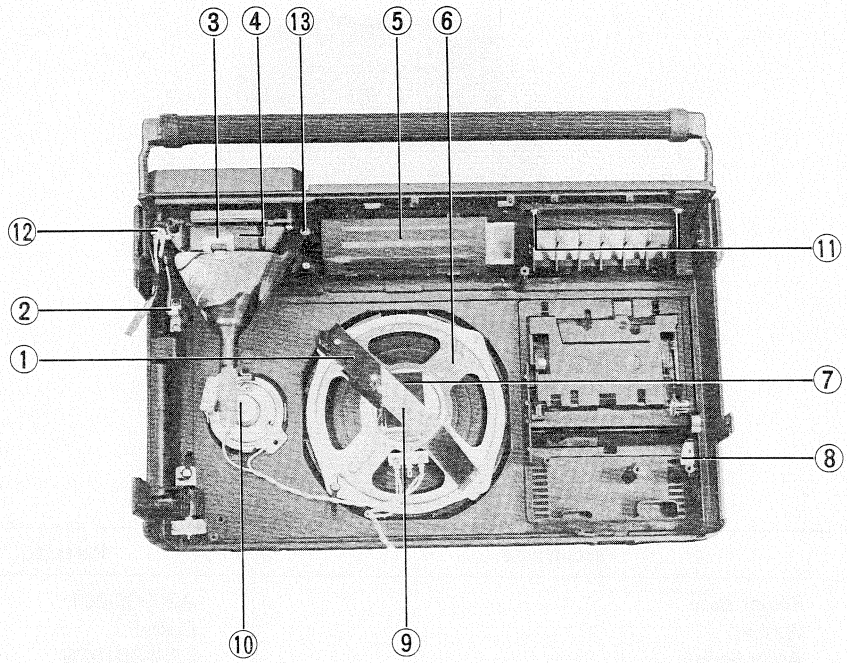


Fig. 40

No.	Parts Name	Parts No.	Q'ty
1	Mounting Base	A32068-001	1
2-1	Push Switch	QSP1210-021	1
-2	Lock Knob	A45920-001	1
-3	Tapping Screw	SDSA3012Z	2
3	Earth Spring	A45929-001	1
4	CRT Holder	A20905-001	1
5	Indicator Mask	A32071-001	1
6	Speaker	EAS-16P111SC	1
7	Stick Sheet	A41545-079	1
8	Door Spring	A45711-001	1
9	Mounting Bracket	A32074-001	1
10	Speaker	EAS-5PH50SG	1
11	Frange Nut	NFZ3000ZS	2
12	Wire Clamp	55234-4	1
13	Lamp Holder	A60066-001	1

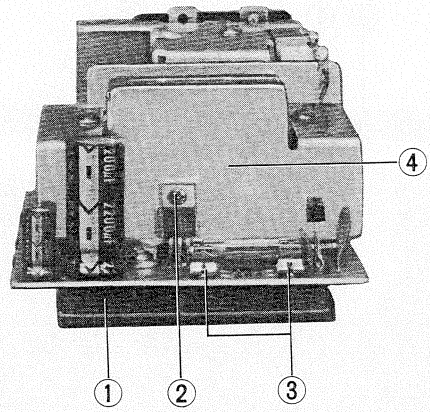


Fig. 41

No.	Parts Name	Parts No.	Q'ty
1	Power Base	A20909-001	1
2-1	Washer	Bush-F	1
-2	Ass'y Screw	LPSP3010ZS	1
-3	Washer	WNS3000Z	1
-4	Nut	NNZ3000ZS	1
-5	Spacer	IS-313	1
3	Fuse Clip	A44594-001	2
4	Heat Sink	A20913-001	1

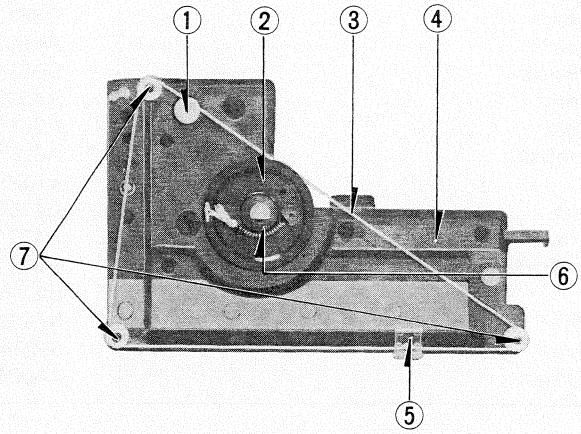


Fig. 42

No.	Parts Name	Parts No.	Q'ty
1-1	Tuning Shaft	A45934-001	1
-2	E. Ring	REE4000	1
2	Tuning Drum	A32084-001	1
3	Dial Cord	A45773-001	1
4	Tuning Base	A20907-00A	1
5	Channel Needle	A45922-001	1
6	Spring	53498-3	1
7-1	Roller	V40409-3	3
-2	Special Washer	V42562-1	3

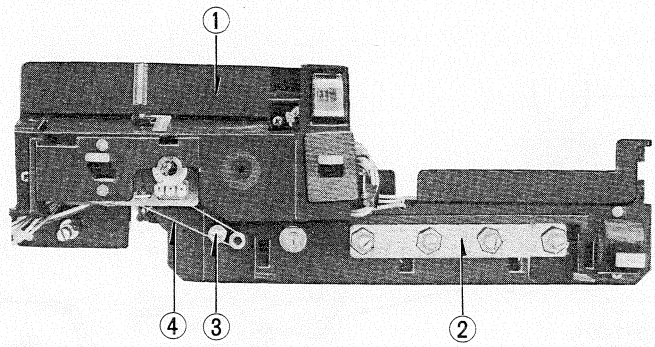


Fig. 43

No.	Parts Name	Parts No.	Q'ty
1	Control Chassis	A10380-00A	1
2	Earth Plate	A45938-001	1
3-1	Tuning Shaft	A45935-001	1
-2	E. Ring	REE4000	1
4	Dial Cord	A45773-001	1

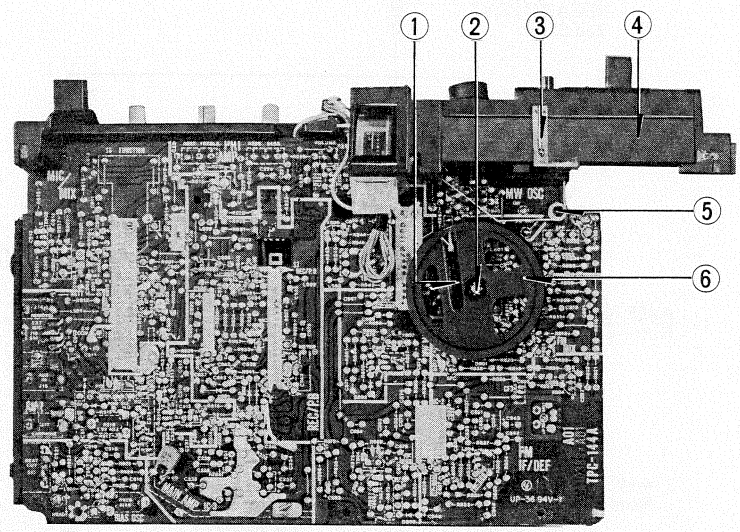
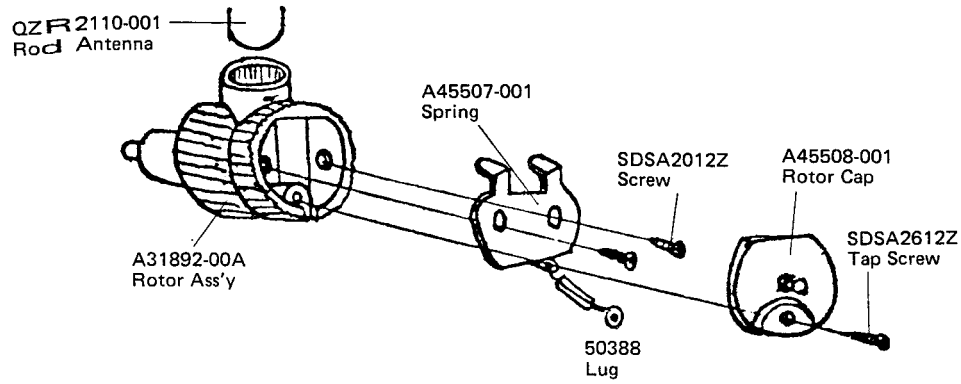


Fig. 44

No.	Parts Name	Parts No.	Q'ty
1	Spring	53498-3	1
2-1	Screw	SPSP2608Z	1
-2	Tooth Lock Washer	WBS2600Z	1
3	Dial Needle	A45923-001	1
4	Control Chassis	A10380-00A	1
5-1	Roller	V40409-3	6
-2	Special Washer	V42562-1	5
6	Tuning Drum	A32069-001	1


QZR2110-001
Rod Antenna
A45507-001
Spring
SDSA2012Z
Screw
A45508-001
Rotor Cap
SDSA2612Z
Tap Screw
A31892-00A
Rotor Ass'y
50388
Lug

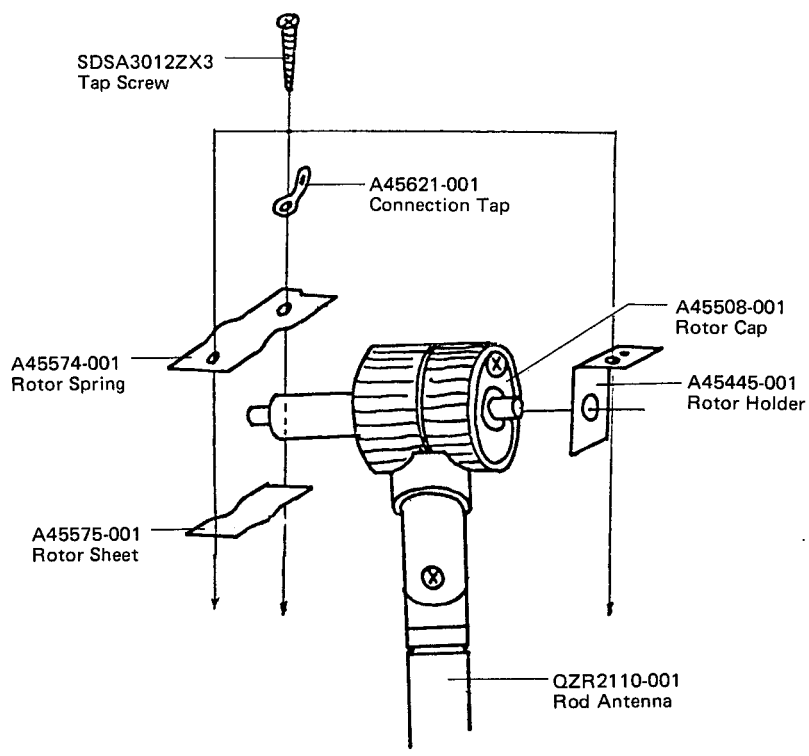

SDSA3012ZX3
Tap Screw
A45621-001
Connection Tap
A45508-001
Rotor Cap
A45574-001
Rotor Spring
A45445-001
Rotor Holder
A45575-001
Rotor Sheet
QZR2110-001
Rod Antenna

Fig. 45

Block Diagram

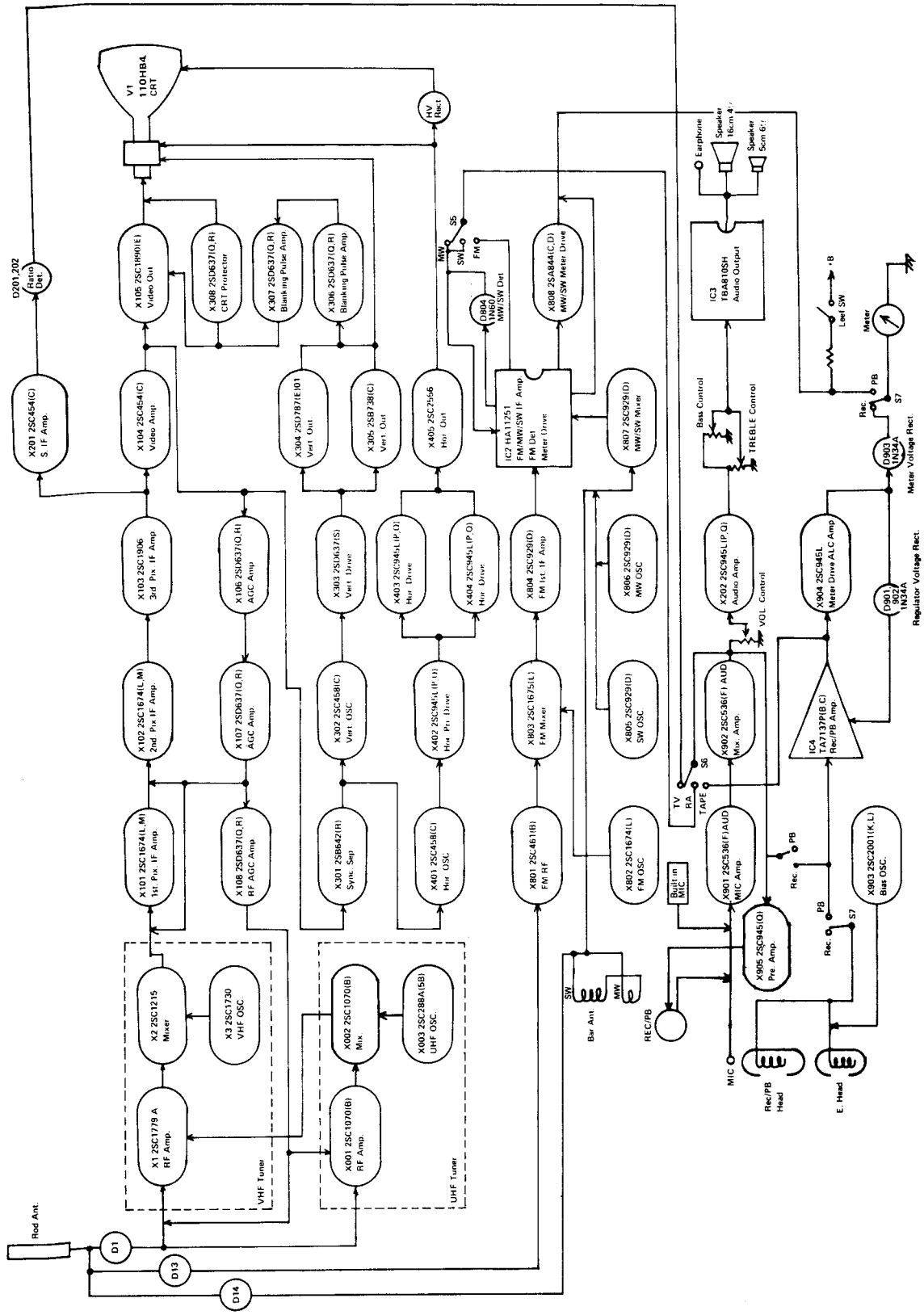


Fig. 46

Electronic Parts List For TV.

Symbol No.	Parts No.	Description
Transistors		
X1	2SC1779-A	RF Amp.
X2	2SC1215	Mixer
X3	2SC1730	VHF OSC.
X101	2SC1674(L,M)	1st. Pix. IF. Amp.
X102	2SC1674(L,M)	2nd. Pix. IF. Amp.
X103	2SC1906	3rd. Pix. IF. Amp.
X104	2SC454(C)	Video Amp.
X105	2SC1890(E)	Video Output
X106	2SD637(Q,R)	AGCAmp.
X107	2SD637(Q,R)	AGC Amp.
X108	2SD637(Q,R)	RF. AGC Amp.
X201	2SC454(C)	S. IF. Amp.
X301	2SB642(R)	Sync. Sep.
X302	2SC458(C)	Vert. OSC.
X303	2SD637(S)	Vert. Drive
X304	2SD787(E)01	Vert. Output
X305	2SB738(C)	Vert. Output
X306	2SD637(Q,R)	Blanking Plus Amp.
X307	2SD637(Q,R)	Blanking Plus Amp.
X308	2SD637(Q,R)	CRT Protector
X401	2SC458(C)	Hor. OSC.
X402	2SC945L(P,Q)	Hor. Pri. Drive
X403	2SC945L(P,Q)	Hor. Drive
X404	2SC945L(P,Q)	Hor. Drive
X405	2SC2556	Hor. Output
X501	2SD313E	Voltage reg.
X502	2SC945L(P,Q)	Voltage Drive
IC		
IC1	MPC574J	Vol. Reg.
Diodes		
D1,3,4,6,7,9, 13,14,15	1S2222	Band Switch Diode
D5,8,11	MA320G2V	Variable Capacitance Diode
D12	1S188AM	Diode
D101	1N60TF1	Diode
D102,103	HV23GBLV	Diode
D201,202	1N60TF1	Diode (Pair)
D301,401,402, 403,406,407	1N34ATF1	Diode
D302	HV23G-13	Diode
D303	HV70-02	Diode
D404,405,409	10E2(V)	Silicon Power Diode
D408	RH1ALF	Silicon Power Diode
D410	1SS55(V)	Diode
D411	1S2076V	Diode
D501,502	S2VC20(V)	Si. Diode Stack
D503	RD11EB-2	Zener Diode
CRT		
V1	110HB4	Picture Tube
Coils & Transformers		
L1	A44900-13-1	RF. Coil
L3	A44900-47-1	RF. Coil
L4	A44900-11-2	RF. Coil
L5	A44899-5-5	RF. Coil
L6	A44899-3-1	RF. Coil
L7,9,14	A44900-49-5	RF. Coil
L8,12	A44900-5-1	RF. Coil
L11	A44900-25-1	RF. Coil
L13	A44900-9-2	RF. Coil
L101	A45742-00B	S. Trap Coil Ass'y
L102	A45412-00B	2nd. Pix. IF. Coil
L103	A04725-15	Peaking Coil
L104	A04872-82	Peaking Coil
L105	A04376-102A	Peaking Coil
L301,302,404 405	A32090-00A	Def. Yoke Ass'y
L401	A44897-00C	Hor. OSC. Coil Ass'y
L402	A04359-500	Choke Coil
L403	A04368-002	Linearity Coil
T1	A45427-00A	Matching Trans. Ass'y
T2	A45247-00B	Matching Trans. Ass'y
T3	A45379-00C	Conv. Trans. Ass'y
T101(C102)	A45380-00B	1st. Pix. IF. Trans. Ass'y
T102(C116)	A45314-00A	3rd. Pix. IF. Trans. Ass'y
T103(C118)	A45315-00A	4th. Pix. IF. Trans. Ass'y
T201(C202)	A45382-00B	Sound IF. Trans. Ass'y
T202,203 (C209)	A31101-B	Ratio Trans. Ass'y
T401	A32089-00A	HV Trans. Ass'y
T501	A03204-00D	Power Trans. Ass'y
Variable Resistors		
R29	QVP2A0B-024	Tuning 20kΩB
R31	QVP2A0B-024	Sub-Tuning 20kΩB
R32	QVP2A0B-015	Sub-Tuning 100kΩB
R34	QVP2A0B-015	Sub-Tuning 100kΩB
R37	QVF1A6B-015F	Tuning 100kΩB
R134	QVF4A6B-025	Bright 200kΩB
R136	QVG6A2C-013	Contrast 1kΩC
R152	QVP2A0B-053	AGC 5kΩB
R312	QVF4A6B-025	V. Hold 200kΩB
R318	QVP2A0B-024	V. Height 20kΩB
R322	QVP2A0B-023	V. Lin 2kΩB
Resistors (Power & Special)		
R325	A04292-104	Negative Thermistor
R333	QRX125K-1R5	Metal Film Resistor
R502	QRF209K-5R0	Unflammable Resistor
R503	QRF108K-8R2	Unflammable Resistor
Electrolytic Capacitors		
C125,526	QET61AR-107Z	100μF 10WV
C127,137	QEW61EA-475Z	4.7μF 25WV
C132,313	QET60JR-227	220μF 6.3WV
C139	QET61AR-227	220μF 10WV
C216,312,314, 423	QEW61CA-106Z	10μF 16WV
C242	QEN21EM-335	3.3μF 25WV
C302,407	QEW61HA-105Z	1μF 50WV
C308	QEV60JR-108	1000μF 6.3WV
C309,311	QEE51AK-106	10μF 10WV
C316,421,427	QET60JR-108	1000μF 6.3WV
C318	QET61AR-336Z	33μF 10WV
C405	QEW61EA-335Z	3.3μF 25WV
C411	QET60JR-477	470μF 6.3WV
C413	QET60JR-107	100μF 6.3WV
C415,527	QET61AR-476	47μF 10WV
C422	QET61HR-476	47μF 50WV
C425	QEW61JA-105Z	1μF 63WV
C504	QEW61EA-228	2200μF 25WV
C505	QEW61CA-227	220μF 16WV
C525	QET60JR-228	2200μF 6.3WV

Symbol No.	Parts No.	Description
	Capacitors	
C418	QFP32DK-563	Polypropylene Capacitor
C419	QFP32XK-332	Polypropylene Capacitor
	C.R. Blocks	
CR1	A03008-019	C16,R8
CR2	A03008-013	C25,R19
CR3	A03008-013	C106,R104
CR4	A03008-013	C111,R108
CR5	A03008-018	C213,214,215,R211,212
CR6	A03008-006	C502,503
	Speakers	
	EAS-16P111SC	4Ω 16cm
	EAS-5PH50SG	6Ω 5cm
	Sockets & Plug (Connector)	
J2	A03085-00A	5P Connector Ass'y
J3	A03083-00C	3P Connector Ass'y
J4	A03087-00A	7P Connector Ass'y
J5	A03083-00E	3P Connector Ass'y
J6	A03086-00B	6P Connector Ass'y
J8,S11	QMC0263-003	AC Socket Ass'y
J9,S10	QMA1221-003	Ext. Batt. Jack Ass'y
J10	QMC0233-101	Socket Ass'y

Symbol No.	Parts No.	Description
J11	A03083-00F	3P Connector Ass'y
J13	A03084-00B	4P Connector Ass'y
P1	A41267-B	Plug Ass'y
P3,5,11	QMV5002-003	Connector
P4	QMV5002-007	Connector
P7	QMV5003-004	Connector
P8	QMP3950-183	Power Cord with Plug
P12	QMV5002-004	Connector
	A31989-00C	CRT Socket Ass'y
	Switch	
S1	QSR6083-302	Rotary Switch
S2	QSS2201-031	Slide Switch
S3	QSL0006-001	Lever Switch
S4	QSP1210-021	Push Switch
S9	QSS2228-102	Slide Switch
	Miscellaneous	
CF1	A04306-B	Ceramic Filter
FUSE 1	QMF51A2-R125	250V T125mA
FUSE 2,3	QMF51A2-1R25	250V T1.25A
	QZR2110-001	Rod Antenna
	QMP3950-183	Power Cord with Plug
PL2	QLP3104-217	Pilot Lamp
	A45743-00A	U-V Separator
	QME1308-004	Magnetic Earphone

Electronic Parts List For Radio

Symbol No.	Parts No.	Description
	Transistors	
X202	2SC945L(P,Q)	Audio Amp.
X503	2SD313(E)	Motor Vol. Reg.
X504	2SA738(C)	Vol. Reg.
X505	2SA844(C,D)	Vol. Drive
X506	2SC945L(P,Q)	Error Amp.
X801	2SC461(B)	FM RF.
X802	2SC1674(L)	FM OSC.
X803	2SC1675(L)	FM Mixer
X804	2SC929(D)	FM 1st. IF Amp.
X805	2SC929(D)	SW OSC.
X806	2SC929(D)	MW OSC.
X807	2SC929(D)	MW/SW
X808	2SA844(C,D)	MW/SW Meter Drive
X901	2SC536(F) AUD	MIC Amp.
X902	2SC536(F) AUD	Mix. Amp.
X903	2SC2001(K,L)	Bias OSC.
X904	2SC945L(Q)	Meter Drive Amp.
X905	2SC945L(Q)	Pre. Amp.
	ICs	
IC2	HA11251	FM/MW/SW IF Amp.
IC3	TBA810SH	Audio Out.
IC4	TA7137P(B,C)	Rec/PB Amp.
	Diodes	
D504	RD6,8EV	Zener Diode
D505,902,903	1N34ATF1	Diode
D506	HZ4AV	Zener Diode
D507,802,803, 901	1S2076V	Diode

Symbol No.	Parts No.	Description
D801	SD113V	Variable Capacitance Diode
D804	1N60TF1	Diode
D805	HV23GBLV	Diode
	Coils & Transformers	
L201	A04359-100	Choke Coil
L202,502	A04359-500	Choke Coil
L501	T41572-001	Choke Coil
L801	A45973-00B	RF Coil
L802	A04376-R68A	Peaking Coil
L803	A60097-00A	RF Coil
L804	A45986-00A	FM Det. Coil
L805	A04376-180A	Peaking Coil
L901	A04376-471A	Peaking Coil
L902	03226-17	Inductor
T801(C815)	A45958-00A	IF Trans.
T802	V03101-025	OSC. Trans.
T803	VQM1T03-201	OSC. Trans.
T804(C877)	V03067-25	Det. Trans.
T805	A32122-00A	Bar Ant. Ass'y
T901(C917)	A45738-00A	Bias OSC. Trans. Ass'y
	Variable Resistors	
R221	QVG5A2A-024	Vol. 20kΩA
R227	QVG5A2A-015	Treble 100kΩA
R228	QVG5A2A-015	Bass 100kΩA
R518	QVP5A0B-013	5.9V Adj. 1kΩB
R908	QVF4A6W-024F	Mix 20kΩW
R926	QVP5A0B-054	Bias 50kΩB
	Resistors	
R233	QRX129J-1R0	Metal Film Resitor

Symbol No.	Parts No.	Description	
R511	QRX029J-3R3	Metal Film Resistor	
Electrolytic Capacitors			
C221,909	QEW61HA-474Z	0.47μF	50WV
C222,834,878, 879,929	QEW61AA-476Z	47μF	10WV
C232,236	QEW60JA-227	220μF	63WV
C233,237	QET61CR-108	1000μF	16WV
C234,846,916	QEW61AA-107Z	100μF	10WV
C511,884	QEW61AA-477	470μF	10WV
C512,518	QEW61AA-227	220μF	10WV
C514,908,931, 936,941,947, 948	QEW61CA-106Z	10μF	16WV
C517,844,882, 903	QEW61EA-335Z	3.3μF	25WV
C838	QEW61EA-475Z	4.7μF	25WV
C883,885,902, 914	QEW61HA-105Z	1μF	50WV
C901,927	QEW61AA-336Z	33μF	10WV
C907	QEW61EA-335	3.3μF	25WV
C911,934	QEW60JA-477	470μF	6.3WV
C924,939	QEW61CA-106	10μF	16WV
Capacitors			
C804,805,822, 823,851,852, 853,854	QAP1224-504	Variable Capacitor	
C859	QFS21HJ-332	Polystyrol Capacitor	
C861,862	QAT2002-001	Trimmer Capacitor	
C.R. Block			
CR7	03126-15	C887,888,R871	

Symbol No.	Parts No.	Description
Filters		
CF3	V03059-7	Ceramic Filter
CF4	A45975-00A	Ceramic Filter
(C872,873)	A45961-00B	Band Pass Filter
Switch		
S5	QSR4663-20A	Rotary Switch
S6	QSR5083-25A	Rotary Switch
S7	QSS9201-001	Slide Switch
S8	QSL2218-113	Lever Switch
S12	A32088-00A	Power Switch Ass'y
S16	QSP2210-061	Push Switch
Sockets & Jacks		
J7	A03084-00D	4P Connector Ass'y
J12	A03084-00C	4P Connector Ass'y
J14,16,17, S14,15	A32075-00B	Jack Board Ass'y
J15	QMC9014-006	DIN Socket
P6	QMV5002-006	Connector
P13	QMV5002-004	Connector
Miscellaneous		
PL1	QLP3104-216	Pilot Lamp
	A04369-102	E.C. MIC
	A45985-00A	Meter
	V04041-1	Test Point

UHF Tuner

Symbol No.	Parts No.	Description	
Transistors			
X001	2SC1070(B)V	RF Amp.	
X002	2SC1070(B)V	Mix.	
X003	2SC288A(5B)	UHF OSC.	
Diodes			
D001,002,003	1S2208	Variable Capacitance Diode	
Coils			
L001,002	A44899-15-1	RF. Coil	

Symbol No.	Parts No.	Description	
L004,008	A44900-7-5	RF. Coil	
L010	A04378-1R0	Choke Coil	
L015	A44899-23-5	RF. Coil	
Electrolytic Capacitors			
C023,026	A04364-001	47μF	10WV
C024	QET61AR-476	0.01μF	10WV
Miscellaneous			
J1	QMC0131-002	Jack Ass'y	
P2	QMV5002-005	Plug Ass'y	

Accessories

	Q'ty
Power Cord with Plug	1
Car Battery Cord (Model AP-23E)	1
Earphone	1
Head Cleaner	2
Short Plug	1
Cassette Tape	1
Schematic Diagram	1
Instruction Book	1

Packing

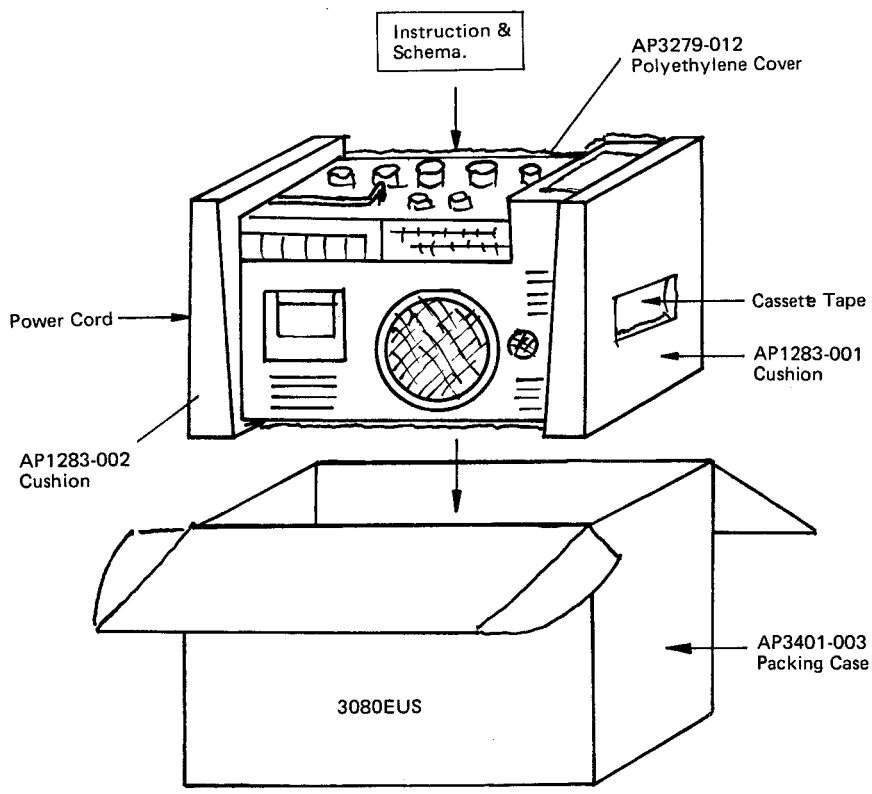
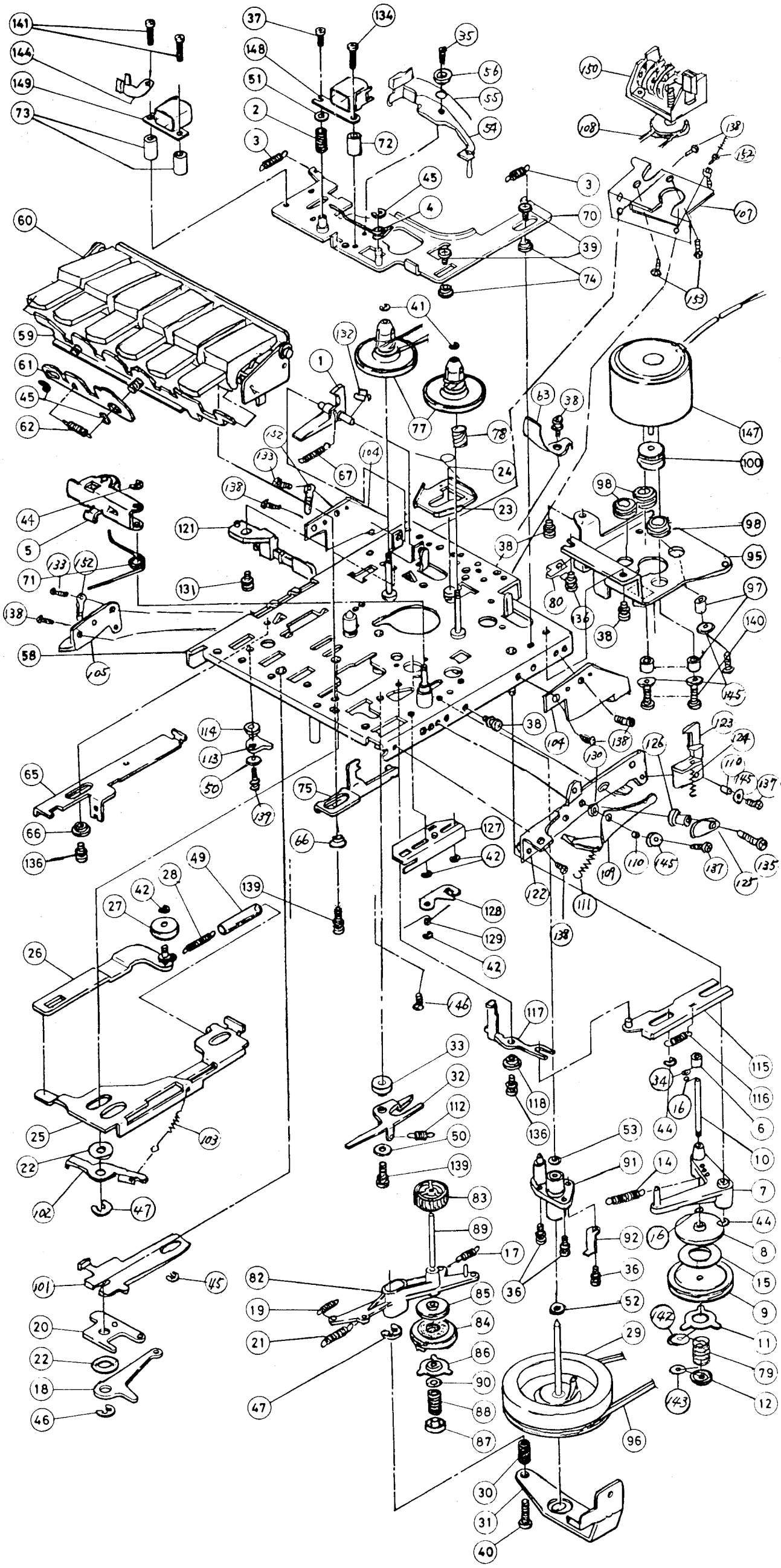
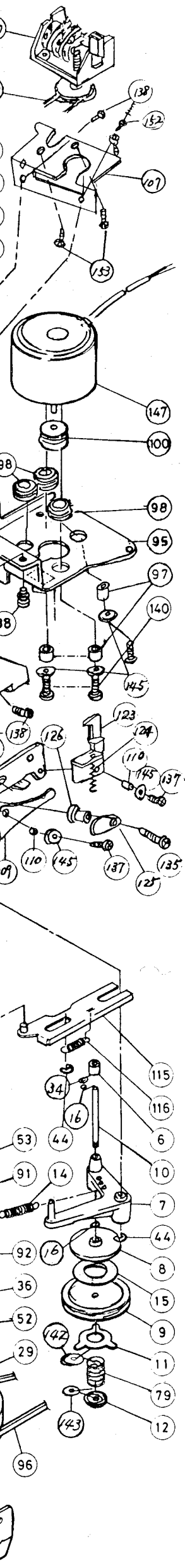


Fig. 47

Exploded View of Cassette Mechanism





Cassette Mechanism Parts List

NO.	PARTS NO.	PARTS NAME	QTY
1	2680503	Rec. Safety Lever	1
2	4080401	Head Panel	1
3	4080413	Spring (for Head Panel)	1
4	4080405	RQ. Spring	1
5	8290481	Pinch Roller Ass'y	1
6	030601	Rew. Idler	1
7	4080792	Clutch Arm Ass'y	1
8	4080704	Clutch Plate	1
9	9730701	Clutch Pulley	1
10	5420705	Clutch Shaft	1
11	4080706	Clutch Spring Plate	1
12	4080720	Clutch Spring	1
14	2380406	Clutch Arm Spring	1
15	580503	Clutch Felt	1
16	9700701	Washer	1
17	581316	Spring (for FF Idler Arm Ass'y)	1
18	4080804	FF. Function Plate	1
19	4080810	Spring (for FF Function Plate)	1
20	4080815	Rwd. Function Plate	1
21	4080810	Spring (for Rwd. Function Plate)	1
22	110505	Special Washer	1
23	4080901	Brake Arm	1
24	4080902	Spring (for Brake Arm)	1
25	4080903	Brake Function Plate	1
26	4081081	Rwd. Idler Arm Ass'y	1
27	2110902	Rwd. Idler	1
28	020905B	Spring (for Rwd. Idler Arm)	1
29	10451101	Flywheel Ass'y	1
30	060405	Spring	1
31	4081195	Flywheel Bracket Ass'y	1
32	4081405	Auto Stop Lever	1
33	4081402	Collar	1
34	4080713	Special Washer (Nylon)	1
35	SSSP2005Z	Screw (M2 x 5)	1
36	LPSP2005Z	Screw (M2 x 5)	1
37	SPSX2006Z	PM' Screw (M2 x 6)	1
38	LPSP2604Z	Screw (M2.6 x 4)	1
39	SDSP2604Z	Screw (M2.6 x 4)	1
40	SPSP2610Z	Screw (M2.6 x 10)	1
41	REE1200	E. Ring (ϕ1.2)	1
42	REE1500	E. Ring (ϕ1.5)	1
43	REE1900	E. Ring ϕ1.9	1
44	REE2000	E. Ring ϕ2	1
45	REE2500	E. Ring ϕ2.5	1
46	REE3200	E. Ring ϕ3.2	1
47	REE4000	E. Ring ϕ4	1
49	ϕ4 x L24	Vinyle Tube	1
50	7061501T	Washer M2.6ϕ	1
51	WNB2000N	Washer ϕ2.3 x ϕ4.3 x 0.4t	1
52	4081120	Special Washer	1
53	031503	Special Washer	1
54	4080492	Stop Detect Lever Ass'y	1
55	4080415	Spring (for Stop Detect Lever)	1
56	4080414	Collar	1
58	12500181	Mecha Chassis Ass'y	1
59	8290281	Lock Plate Ass'y	1
60	12500261	Cassette Knob Ass'y	1
61	8290201	Plate	1
62	5580211	Spring	1
63	6010101	Pack Spring	1
65	5420301	Rec. Slide Lever	1
66	090302	Collar	1
67	1320303	Spring	1
70	5890481	Head Panel Ass'y	1
71	4080503	Pinch Roller Spring	1
72	4080402	R/P Head Collar	1
73	4630402	E. H. Stud	1
74	4080411	Collar (for Head Panel)	1
75	5420408	Pause Slide Lever Ass'y	1
76	090302	Collar	1

NO.	PARTS NO.	P
77	5720695	Reel Disk Ass'y
78	040508	Spring
79	4080720	Clutch Spring
80	8290901	Spring (for Rwd
82	4080891	FF. Idler Arm A
83	6680810	Cue Idler
84	6680802	RF Idler
85	6680803	RF Clutch Plate
86	6680805	Plate
87	6680806	Spring Stopper
88	6680807	RF Clutch Sprin
89	6680808	RF Shaft
90	6680809	Clutch Washer
91	3690701	Fl. Brock
92	4460701	Earth Plate
95	5841201	Motor Bracket
96	9731201	Main Belt
97	4081211	Motor Collar
98	5880904	Rubber Cushion
100	9731202M	Motor Pulley
101	4080806	RQ. Function P
102	4080807	RQ. Lever
103	4080811	Spring (for RQ.
104	12501601	Bracket
105	12501602	Side Bracket
107	7561705	Counter Bracke
108	1231504	Counter Belt
109	6671302	Eject Lever Ass
110	321302	Collar
111	150102	Spring (for Ejec
112	4081407	Spring (for Aut
113	4080305	Stopper B
114	2381304	Stopper B Colla
115	4081581	Slide Lever Ass
116	4081510	Spring (for Slid
117	4081503	Pinch Roller Ar
118	2381304	Collar
121	6301401	Leaf Switch
122	8291902	Eject Bracket
123	6671303	Lock Lever
124	581204	Spring (for Loc
125	540402	Eject Stopper P
126	8291905	Collar
127	5421881	Pause Slide Lev
128	8291401	Pause Lever
129	5421803	Pause Lever Sp
130	8291904	Collar
131	SDSP2606Z	Screw M2.6 x 6
132	2680515	Stopper
133	SPST2606Z	Screw M2.6 x 6
134	SPSP2011Z	Screw M2 x 11
135	SPST2610Z	Screw M2.6 x 1
136	LPSP2605Z	Screw M2.6 x 5
137	LPSP2606Z	Screw M2.6 x 6
138	SPST2604Z	Screw M2.6 x 4
139	LPST2608Z	Screw M2.6 x 8
140	SPSP2607Z	Screw M2.6 x 7
141	SPSP2012Z	Screw M2 x 12
142	4080715	Special Washer
143	4080716	"
144	4080430	Wire Clamp
145	031501T	Special Washer
146	SPSP2606Z	Screw M2.6 x 6
147	EG-510AD-TB	Motor
148	T48301-001	R/P Head
149	V03078-026	E. Head
150	V30712-010	Tape Counter
152	4660901	Wire Clamp
153	LPSP3006ZS	Screw

Cassette Mechanism Parts List

NO.	PARTS NO.	PARTS NAME	QTY
1	2680503	Rec. Safety Lever	1
2	4080401	Head Panel	1
3	4080413	Spring (for Head Panel)	1
4	4080405	RQ. Spring	1
5	8290481	Pinch Roller Ass'y	1
6	030601	Rew. Idler	1
7	4080792	Clutch Arm Ass'y	1
8	4080704	Clutch Plate	1
9	9730701	Clutch Pulley	1
10	5420705	Clutch Shaft	1
11	4080706	Clutch Spring Plate	1
12	4080720	Clutch Spring	1
14	2380406	Clutch Arm Spring	1
15	580503	Clutch Felt	1
16	9700701	Washer	1
17	581316	Spring (for FF Idler Arm Ass'y)	1
18	4080804	FF. Function Plate	1
19	4080810	Spring (for FF Function Plate)	1
20	4080815	Rwd. Function Plate	1
21	4080810	Spring (for Rwd. Function Plate)	1
22	110505	Special Washer	1
23	4080901	Brake Arm	1
24	4080902	Spring (for Brake Arm)	1
25	4080903	Brake Function Plate	1
26	4081081	Rwd. Idler Arm Ass'y	1
27	2110902	Rwd. Idler	1
28	020905B	Spring (for Rwd. Idler Arm)	1
29	10451101	Flywheel Ass'y	1
30	060405	Spring	1
31	4081195	Flywheel Bracket Ass'y	1
32	4081405	Auto Stop Lever	1
33	4081402	Collar	1
34	4080713	Special Washer (Nylon)	1
35	SSSP2005Z	Screw (M2 x 5)	1
36	LPSP2005Z	Screw (M2 x 5)	1
37	SPSX2006Z	PM' Screw (M2 x 6)	1
38	LPSP2604Z	Screw (M2.6 x 4)	1
39	SDSP2604Z	Screw (M2.6 x 4)	1
40	SPSP2610Z	Screw (M2.6 x 10)	1
41	REE1200	E. Ring (ϕ1.2)	1
42	REE1500	E. Ring (ϕ1.5)	1
43	REE1900	E. Ring ϕ1.9	1
44	REE2000	E. Ring ϕ2	1
45	REE2500	E. Ring ϕ2.5	1
46	REE3200	E. Ring ϕ3.2	1
47	REE4000	E. Ring ϕ4	1
49	ϕ4 x L24	Vinyle Tube	1
50	7061501T	Washer M2.6ϕ	1
51	WNB2000N	Washer ϕ2.3 x ϕ4.3 x 0.4t	1
52	4081120	Special Washer	1
53	031503	Special Washer	1
54	4080492	Stop Detect Lever Ass'y	1
55	4080415	Spring (for Stop Detect Lever)	1
56	4080414	Collar	1
58	12500181	Mecha Chassis Ass'y	1
59	8290281	Lock Plate Ass'y	1
60	12500261	Cassette Knob Ass'y	1
61	8290201	Plate	1
62	5580211	Spring	1
63	6010101	Pack Spring	1
65	5420301	Rec. Slide Lever	1
66	090302	Collar	1
67	1320303	Spring	1
70	5890481	Head Panel Ass'y	1
71	4080503	Pinch Roller Spring	1
72	4080402	R/P Head Collar	1
73	4630402	E. H. Stud	1
74	4080411	Collar (for Head Panel)	1
75	5420408	Pause Slide Lever Ass'y	1
76	090302	Collar	1

NO.	PARTS NO.	PARTS NAME	QTY
77	5720695	Reel Disk Ass'y	1
78	040508	Spring	1
79	4080720	Clutch Spring	1
80	8290901	Spring (for Rwd, Function Plate)	1
82	4080891	FF. Idler Arm Ass'y	1
83	6680810	Cue Idler	1
84	6680802	RF Idler	1
85	6680803	RF Clutch Plate	1
86	6680805	Plate	1
87	6680806	Spring Stopper	1
88	6680807	RF Clutch Spring	1
89	6680808	RF Shaft	1
90	6680809	Clutch Washer	1
91	3690701	Fl. Brock	1
92	4460701	Earth Plate	1
95	5841201	Motor Bracket	1
96	9731201	Main Belt	1
97	4081211	Motor Collar	1
98	5880904	Rubber Cushion	1
100	9731202M	Motor Pulley	1
101	4080806	RQ. Function Plate	1
102	4080807	RQ. Lever	1
103	4080811	Spring (for RQ. Lever)	1
104	12501601	Bracket	1
105	12501602	Side Bracket	1
107	7561705	Counter Bracket	1
108	1231504	Counter Belt	1
109	6671302	Eject Lever Ass'y	1
110	321302	Collar	1
111	150102	Spring (for Eject Lever)	1
112	4081407	Spring (for Auto Stop Lever)	1
113	4080305	Stopper B	1
114	2381304	Stopper B Collar	1
115	4081581	Slide Lever Ass'y	1
116	4081510	Spring (for Slide Lever Ass'y)	1
117	4081503	Pinch Roller Arm Lever	1
118	2381304	Collar	1
121	6301401	Leaf Switch	1
122	8291902	Eject Bracket	1
123	6671303	Lock Lever	1
124	581204	Spring (for Lock Lever)	1
125	540402	Eject Stopper Plate	1
126	8291905	Collar	1
127	5421881	Pause Slide Lever Ass'y	1
128	8291401	Pause Lever	1
129	5421803	Pause Lever Spring	1
130	8291904	Collar	1
131	SDSP2606Z	Screw M2.6 x 6	1
132	2680515	Stopper	1
133	SPST2606Z	Screw M2.6 x 6	1
134	SPSP2011Z	Screw M2 x 11	1
135	SPST2610Z	Screw M2.6 x 10	1
136	LPSP2605Z	Screw M2.6 x 5	1
137	LPSP2606Z	Screw M2.6 x 6	1
138	SPST2604Z	Screw M2.6 x 4	1
139	LPST2608Z	Screw M2.6 x 8	1
140	SPSP2607Z	Screw M2.6 x 7	1
141	SPSP2012Z	Screw M2 x 12	1
142	4080715	Special Washer (Nylon)	1
143	4080716	"	1
144	4080430	Wire Clamp	1
145	031501T	Special Washer ϕ2.6	1
146	SPSP2606Z	Screw M2.6 x 6	1
147	EG-510AD-TB	Motor	1
148	T48301-001	R/P Head	1
149	V03078-026	E. Head	1
150	V30712-010	Tape Counter	1
152	4660901	Wire Clamp	1
153	LPSP3006ZS	Screw	1

TELEVISION SCHEMATIC DIAGRAM FOR MODEL 3080EUS

NOTE

1. ALL VOLTAGES MEASURED WITH CIRCUIT TESTER (20KΩV) ON NORMAL RECEPTION.
   SEE NOTE 5 FOR THOSE AT DIODES IN TUNER.

2. ALIGNMENT ═══SHOWS USER CONTROL
   ———SHOWS SERVICEMAN CONTROL

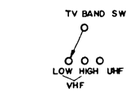
3. ALL RESISTANCE VALUES ARE IN OHMS.
   K ; 1,000 M ; 1,000,000
   UNSPECIFIED ; CARBON RESISTOR ±5% 1/4W
   COMP ; COMPOSITION RESISTOR ±10% 1/2W
   MFR ; METAL FILM RESISTOR ±5% 1/2W
   TH-N ; NEGATIVE THERMISTOR

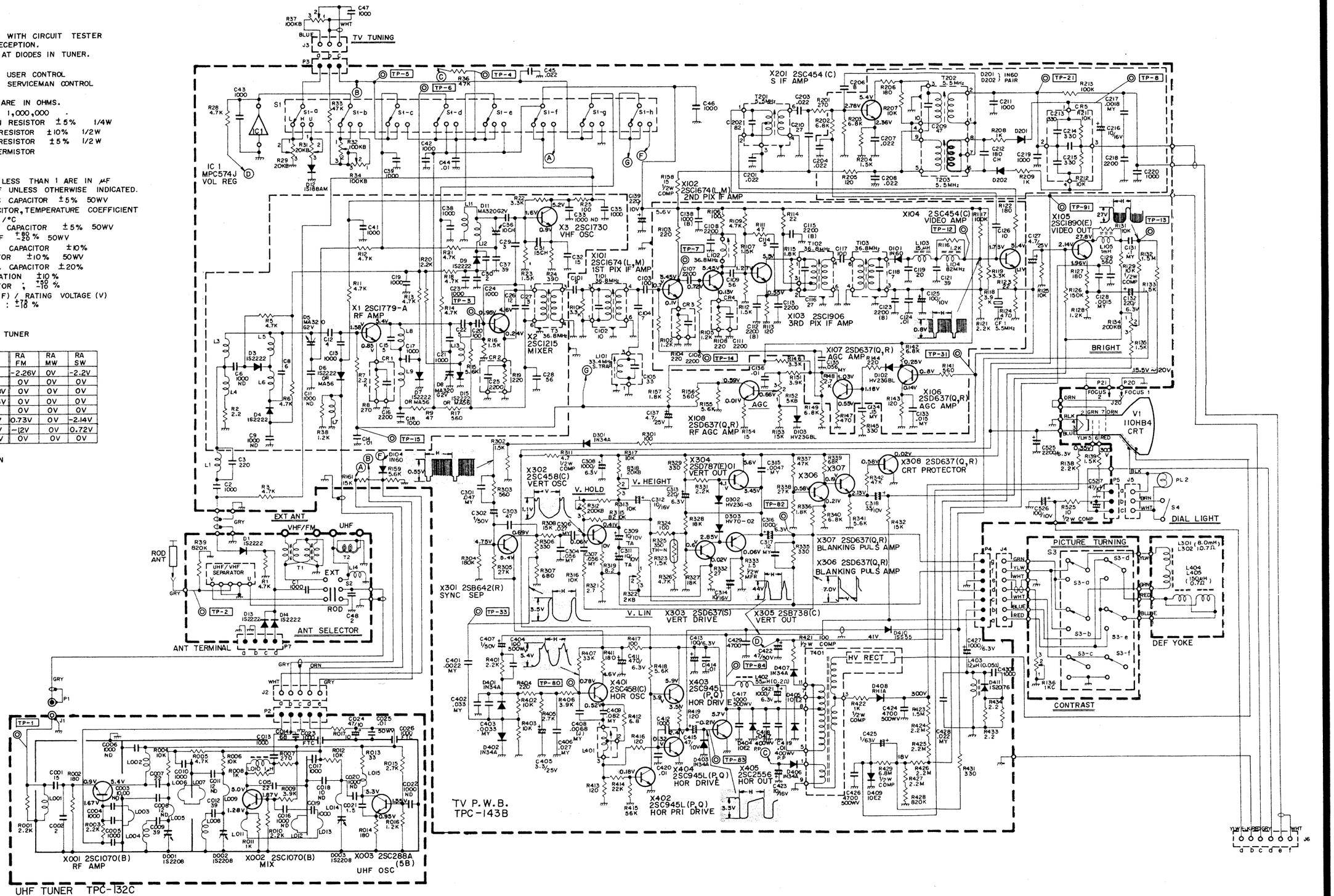
4. ALL CAPACITANCE VALUES LESS THAN 1 ARE IN μF AND ABOVE 1 ARE IN PF UNLESS OTHERWISE INDICATED.
   UNSPECIFIED ; CERAMIC CAPACITOR ±5% 50WV
   CH ; CERAMIC CAPACITOR, TEMPERATURE COEFFICIENT 0±60 PPM /°C
   ND ; NUDE CERAMIC CAPACITOR ±5% 50WV
   ABOVE 1,000PF +80 −20 % 50WV
   PP ; POLYPROPYLENE CAPACITOR ±10%
   MY ; MYLAR CAPACITOR ±10% 50WV
   TA ; TANTAL ELECT. CAPACITOR ±20%
   (B) ; THERMAL DEVIATION ±10 %
   ELECTROLYTIC CAPACITOR ; +50 −10 %
   CAPACITANCE (μF) / RATING VOLTAGE (V)
   UNDER 4.7μF : +75 −10 %

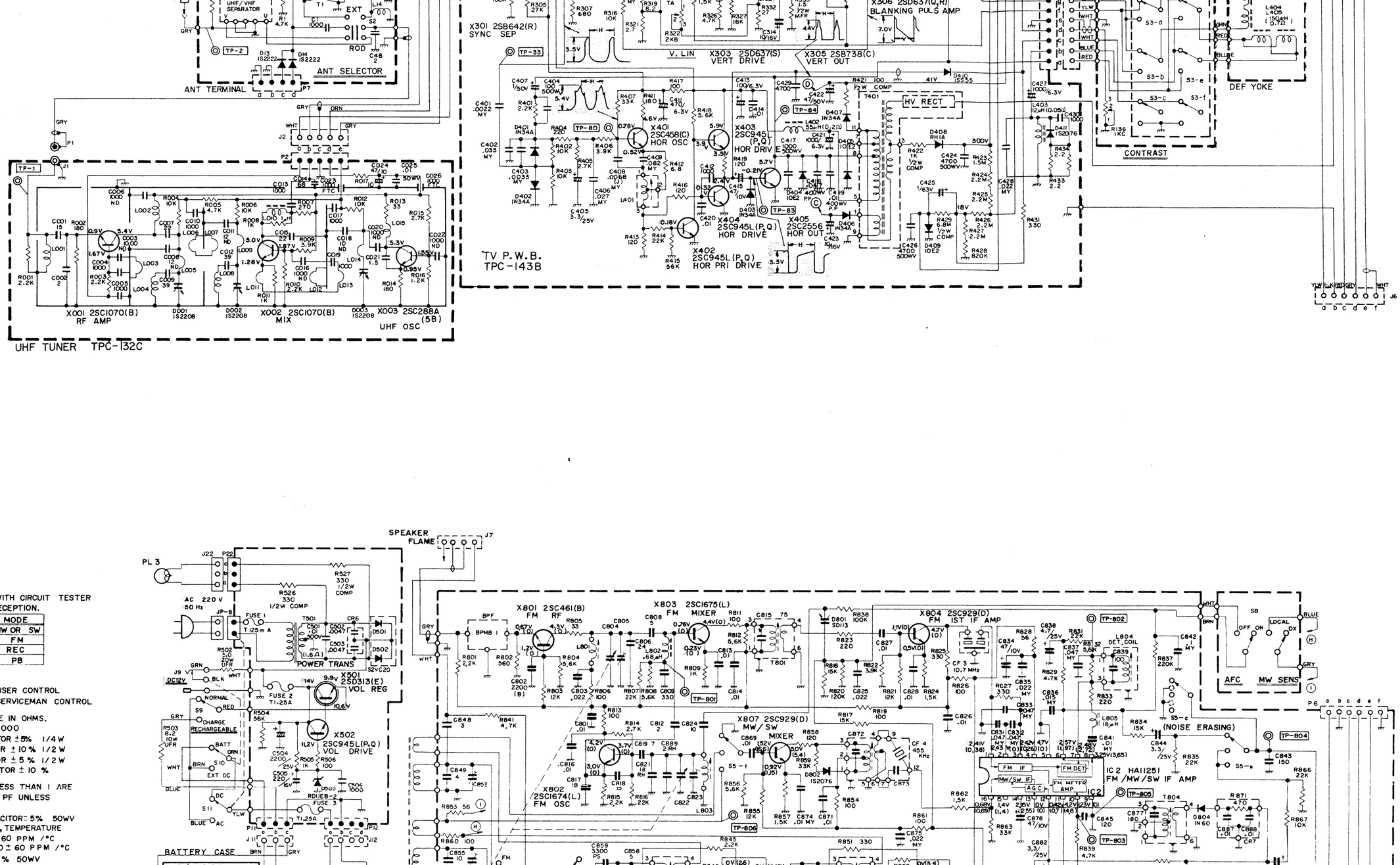
5. VOLTAGES AT DIODES IN TUNER
   (0V AT CATHODE)

BAND / DIODE	VHF LOW	VHF HIGH	UHF	RA FM	RA MW	RA SW
D1	0.73V	0.73V	0V	-2.26V	0V	-2.2V
D3,4,7,9	-9.5V	0.75V	0V	0V	0V	0V
D5, 11	-1.1V ~ -17V	0.68V	0V	0V	0V	0V
D6	-9.5V	-9.5V	0.75V	0V	0V	0V
D8	-1.1V ~ -17V		0V	0V	0V	0V
D13	-2.07V	-2.03V	0V	0.73V	0V	-2.14V
D14	-1.45V	-1.41V	0V	-12V	0V	0.72V
D15	-9.7V	0.78V	0V	0V	0V	0V

6. SELECTOR SW POSITION
   S1 (a~h)







NOTE

1. ALL VOLTAGES MEASURED WITH CIRCUIT TESTER (20KΩ/V) ON NORMAL RECEPTION.

SECTION		MODE
RADIO	( )	MW OR SW
	OTHERS	FM
AMP	( )	REC
	OTHERS	PB

2. ALIGNMENT ═══ SHOWS USER CONTROL
   ——— SHOWS SERVICEMAN CONTROL

3. ALL RESISTANCE VALUES ARE IN OHMS.
   K : 1,000 M : 1,000,000
   UNSPECIFIED: CARBON RESISTOR ±5% 1/4W
   COMP: COMPOSTION RESISTOR ±10% 1/2W
   MFR : METAL FILM RESISTOR ±5% 1/2W
   UFR : UNFLAMMABLE RESISTOR ± 10 %

4. ALL CAPACITANCE VALUES LESS THAN 1 ARE IN μF AND ABOVE 1 ARE IN PF UNLESS OTHERWISE INDICATED.
   UNSPECIFIED : CERAMIC CAPACITOR ± 5% 50WV
   CH, RH: CERAMIC CAPACITOR, TEMPERATURE COEFFICIENT { CH: 0 ± 60 PPM /°C; RH: 220 ± 60 PPM /°C }
   MY : MYLAR CAPACITOR ±10% 50WV
   PS : POLYSTYROL CAPACITOR ± 5% 50WV
   (B) : THERMAL DEVIATION ± 10%
   ELECTROLYTIC CAPACITOR : $\pm^{50}_{10}$ %
   CAPACITANCE (μF) / RATING VOLTAGE (V)
   UNDER 4.7 μF : $\pm^{75}_{10}$ %
   NP : NON POLARIZED ELECTROLYTIC CAPACITOR ±20% 25WV

5. SELECTOR SW POSITIOR

S5(a~h) RADIO BAND SW: FM, SW O, MW O
S6(a~h) SELECTOR: TV O, RA O, TAPE O
S7 (a~i) REC / PB SW: PB, REC

NOTE

1. ALL VOLTAGES MEASURED WITH CIRCUIT TESTER (20KΩ/V) ON NORMAL RECEPTION.

SECTION		MODE
RADIO	( )	MW OR SW
	OTHERS	FM
AMP	( )	REC
	OTHERS	PB

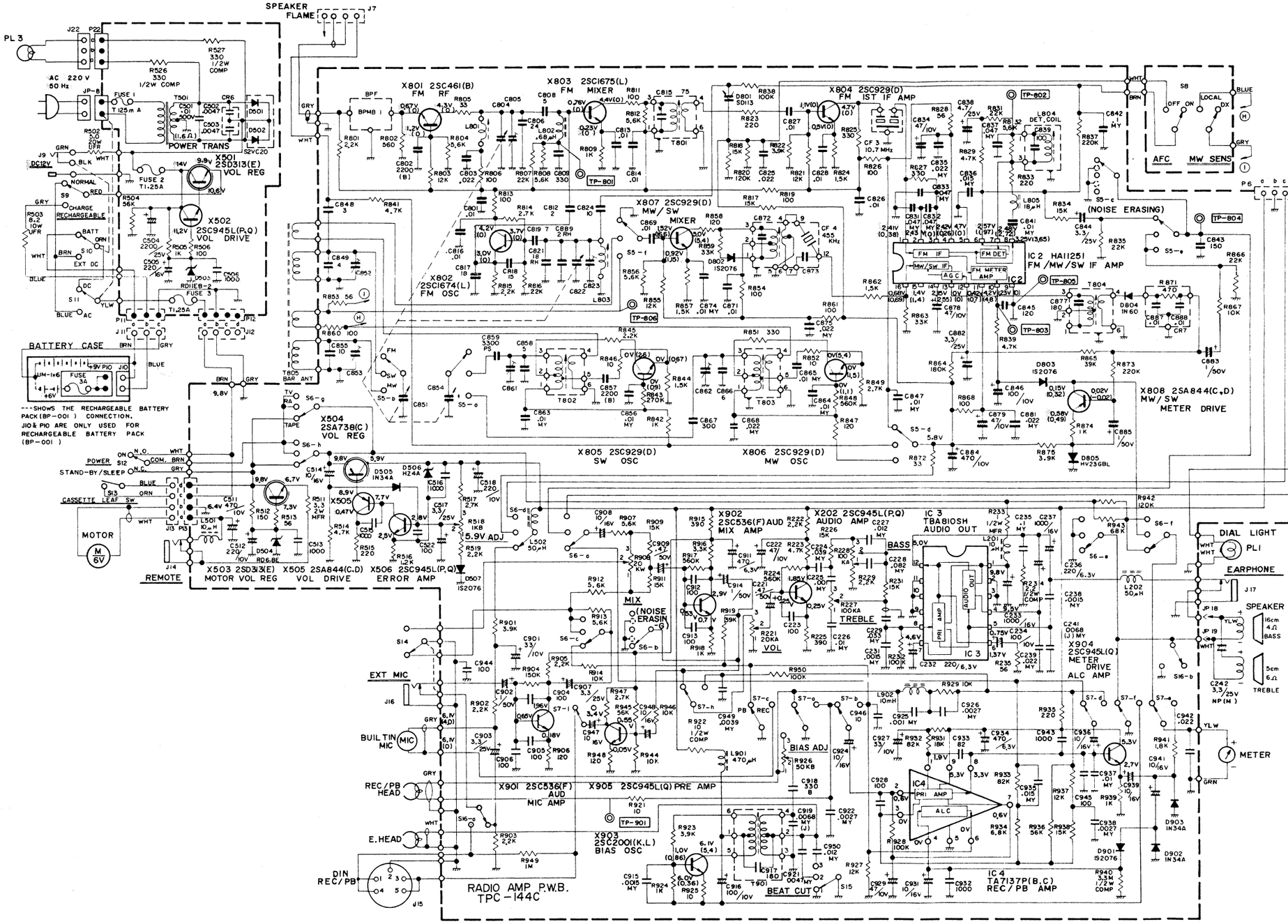
2. ALIGNMENT ═══ SHOWS USER CONTROL
   ——— SHOWS SERVICEMAN CONTROL

3. ALL RESISTANCE VALUES ARE IN OHMS.
   K : 1,000 M : 1,000,000
   UNSPECIFIED : CARBON RESISTOR ±5% 1/4 W
   COMP : COMPOSITION RESISTOR ± 10 % 1/2 W
   MFR : METAL FILM RESISTOR ± 5 % 1/2 W
   UFR : UNFLAMMABLE RESISTOR ± 10 %

4. ALL CAPACITANCE VALUES LESS THAN 1 ARE IN μF AND ABOVE 1 ARE IN PF UNLESS OTHERWISE INDICATED.
   UNSPECIFIED : CERAMIC CAPACITOR ± 5% 50WV
   CH, RH: CERAMIC CAPACITOR, TEMPERATURE COEFFICIENT { CH: 0 ± 60 PPM /°C / RH: 220 ± 60 PPM /°C
   MY : MYLAR CAPACITOR ± 10 % 50WV
   PS : POLYSTYROL CAPACITOR ± 5 % 50WV
   (B) : THERMAL DEVIATION ± 10 %
   ELECTROLYTIC CAPACITOR : +50 −10 %
   CAPACITANCE (μF) / RATING VOLTAGE (V)
   UNDER 4.7 μF : +75 −10 %
   NP : NON POLARIZED ELECTROLYTIC CAPACITOR ±20 % 25WV

5. SELECTOR SW POSITION

S5 (a~h) RADIO BAND SW: FM / SW O / MW O
S6 (a~h) SELECTOR: TV O / RA O / TAPE O
S7 (a~i) REC / PB SW: PB O O REC

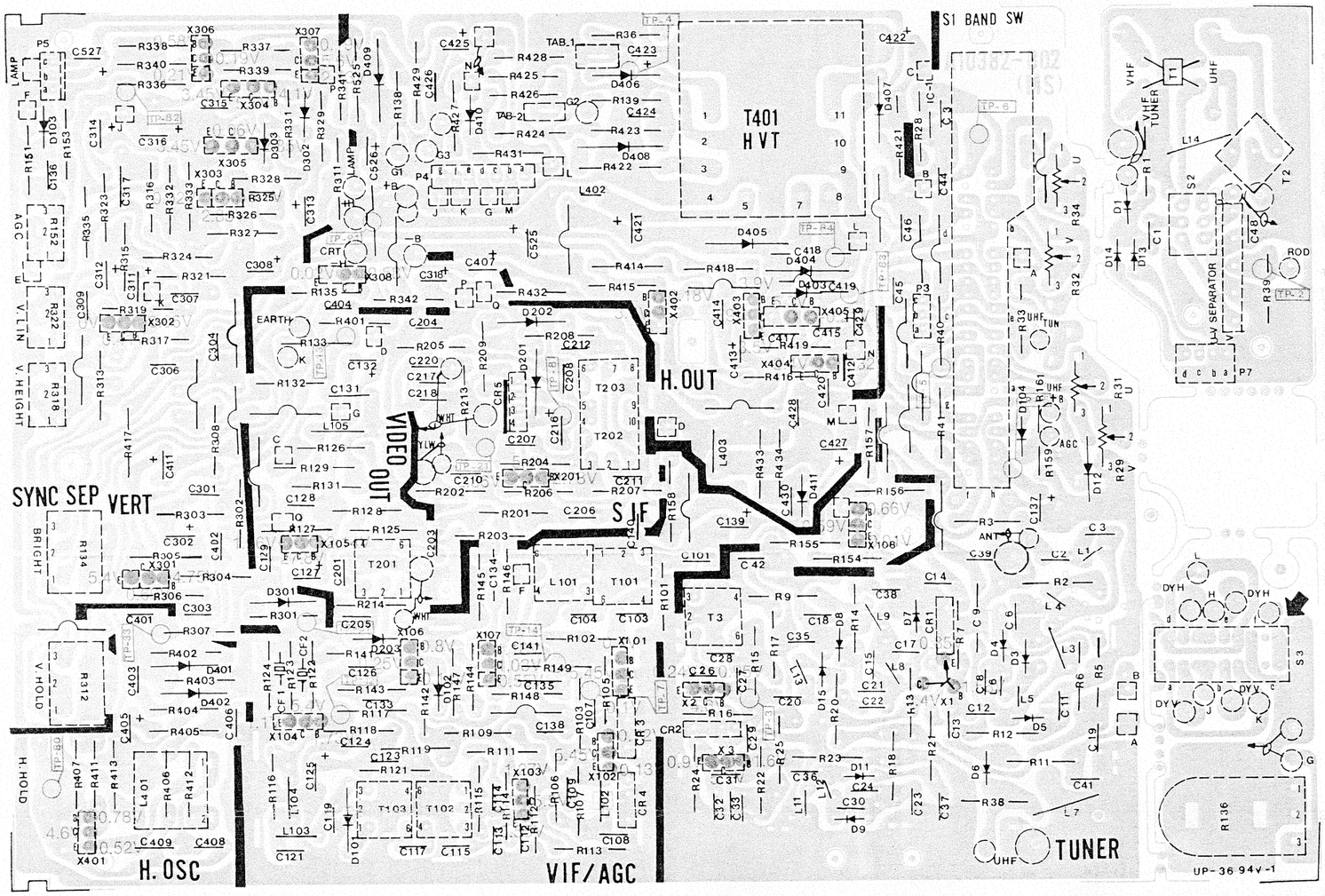


JVC

VICTOR COMPANY OF JAPAN, LIMITED
B/W TELEVISION DIVISION

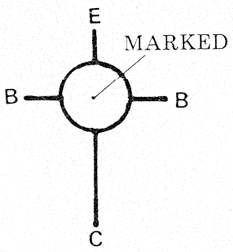
MODEL 3080EUS

Model 3080EUS Reverse Pattern of Printed Circuit Board

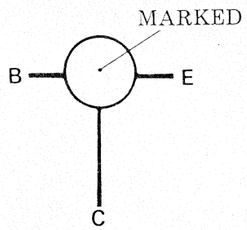


The Reverse Pattern of Printed Circuit Board for TV.

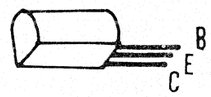
IC & Transistor Basing.



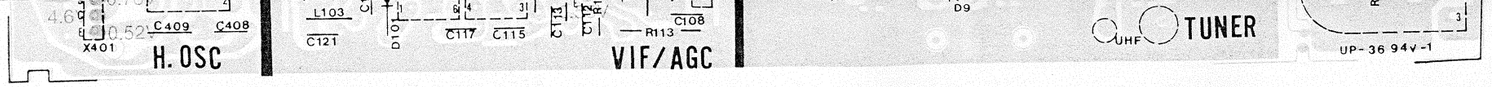
2SC1070(B)



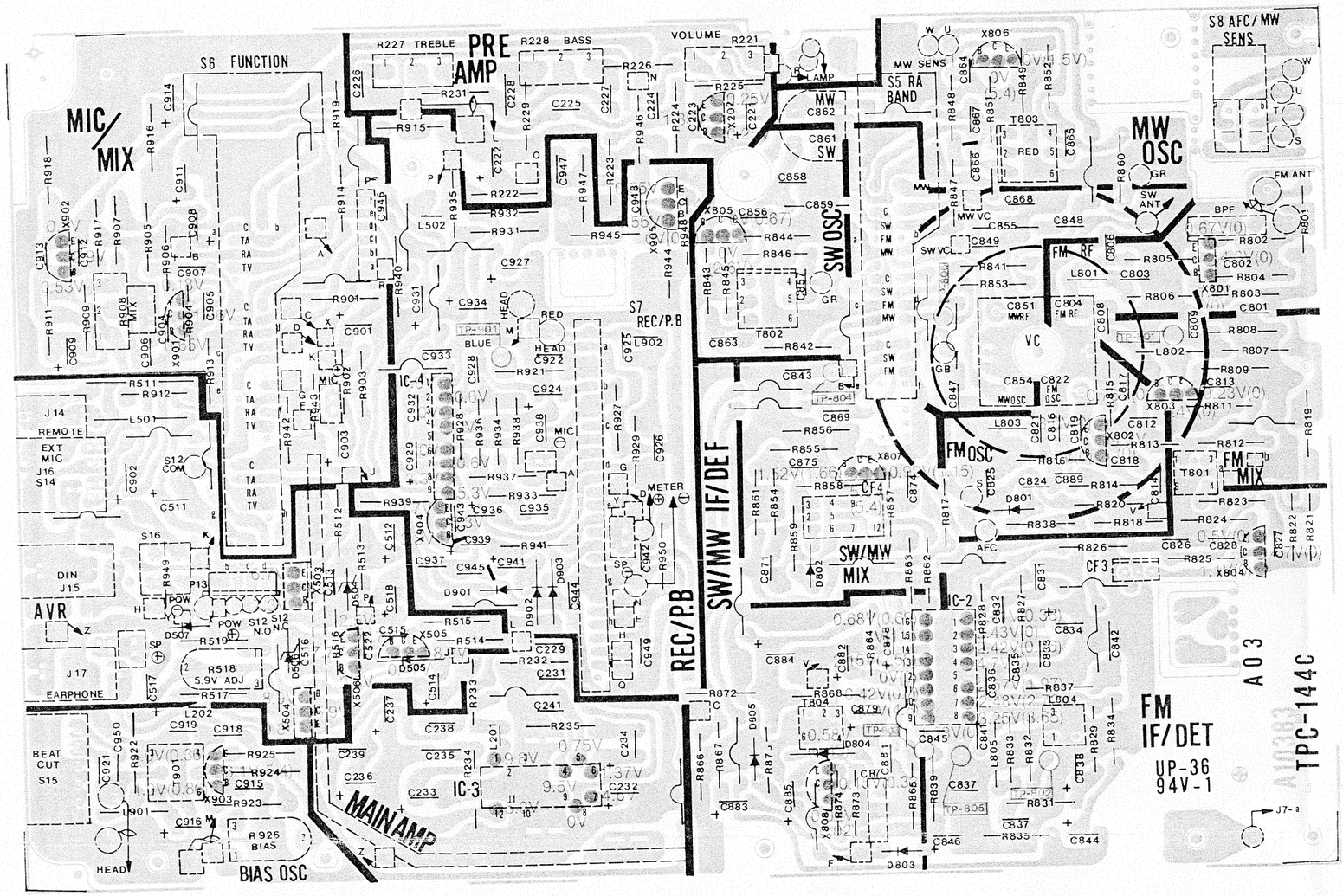
2SC288A(5B)

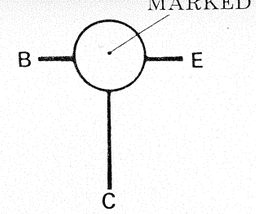


2SC1779-A

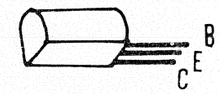


The Reverse Pattern of Printed Circuit Board for TV.

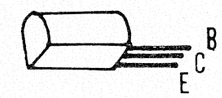




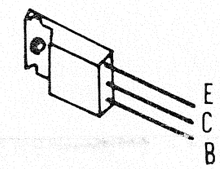
2SC288A(5B)



2SC1779-A

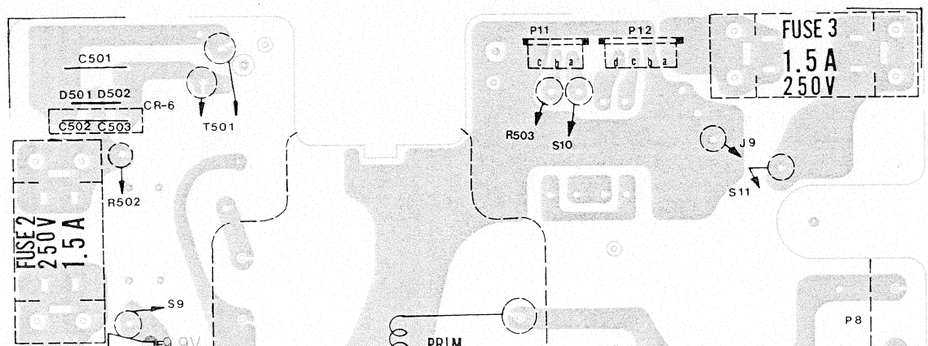


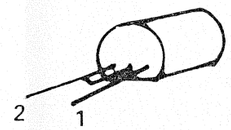
2SC1215
2SC1674(L,M)
2SC1890(E)
2SC945L(P,Q)
2SC929(D)
2SC536(F)AUD
2SC2001(K,L)
2SC1730
2SC1906
2SC461(B)
2SC1675(L)
2SC738(C)
2SD787(E)01



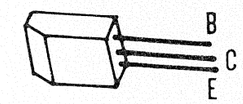
2SD313(E)

The Reverse Pattern of Printed Circuit Board for Radio and Amp.

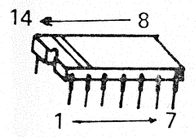




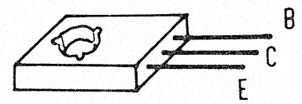
μPC574J



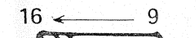
2SC454(C)
2SC458(C)
2SA844(C,D)

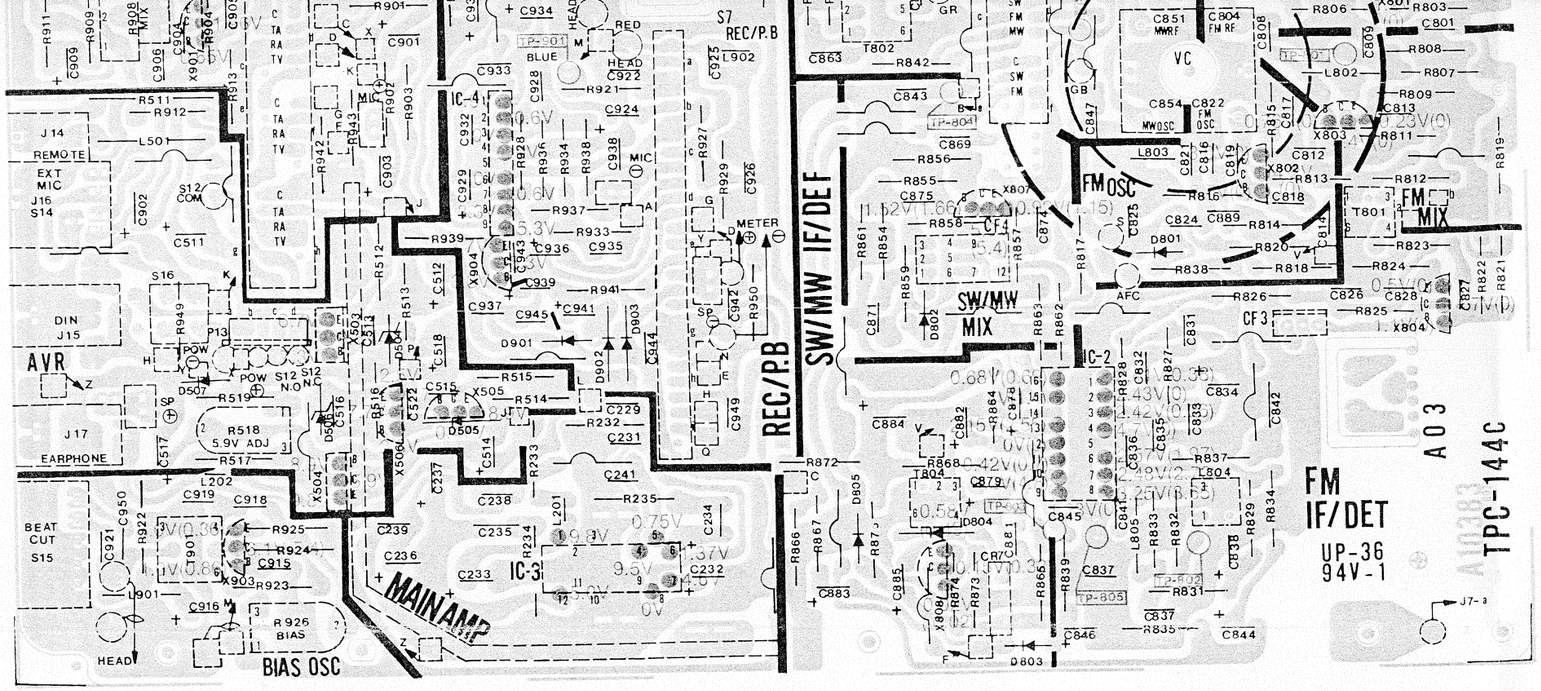


IC LA1201

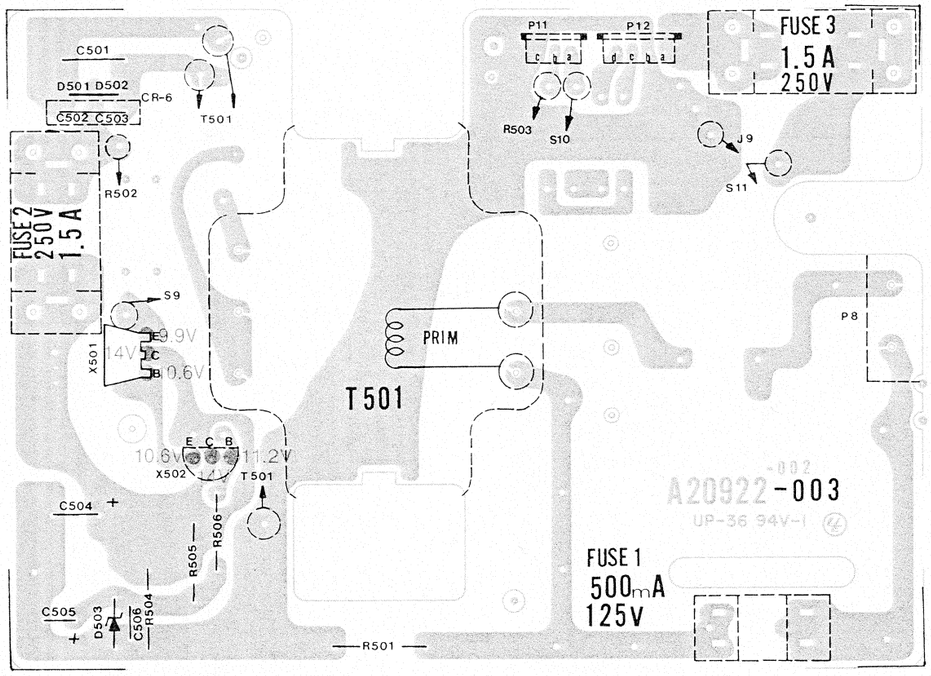


2SA738(C)



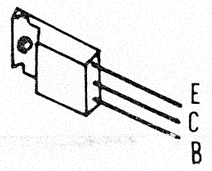


The Reverse Pattern of Printed Circuit Board for Radio and Amp.

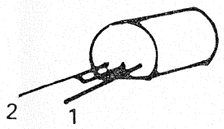


The Reverse Pattern of Printed Circuit Board for Power Supply.

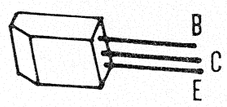
2SC1215
2SC1674(L,M)
2SC1890(E)
2SC945L(P,Q)
2SC929(D)
2SC536(F)AUD
2SC2001(K,L)
2SC1730
2SC1906
2SC461(B)
2SC1675(L)
2SC738(C)
2SD787(E)01



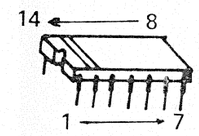
2SD313(E)



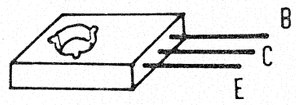
μPC574J



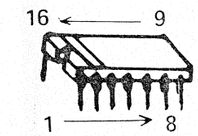
2SC454(C)
2SC458(C)
2SA844(C,D)



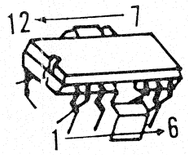
IC LA1201



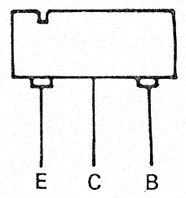
2SA738(C)
2SC2256



HA11251



IC TBA810SH



2SB642(R)
2SD637